

COMMISSION OF THE EUROPEAN COMMUNITIES

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Amended proposal for a

COUNCIL REGULATION (EC)

**CONCERNING A COMMUNITY PROGRAMME PROVIDING FINANCIAL SUPPORT FOR THE PROMOTION OF
EUROPEAN ENERGY TECHNOLOGY 1995-1998 ("THERMIE II")**

(presented by the Commission pursuant to Article 189 A (2)
of the EC-Treaty)

EXPLANATORY MEMORANDUM

PROMOTION OF EUROPEAN ENERGY TECHNOLOGIES

A COMMUNITY PROGRAMME PROVIDING FINANCIAL SUPPORT FOR THE PROMOTION OF EUROPEAN ENERGY TECHNOLOGY 1995-1998 ("THERMIE-II")

0 INTRODUCTION

- 0.1 The Energy situation in the Community as well as the necessity to contribute to the achievement of the goals of its economic and political integration as laid down in the Treaty establishing the European Union call for public action to promote European Energy Technologies on the market. The Community programme "THERMIE", decided by the Council of Ministers on 29 June 1990¹ and granting financial support for this expires on 31 December 1994.
- 0.2 The Commission has charged experts to assess the results of the THERMIE programme and presents its reports on the implementation of the regulation and on the compatibility between national and Community action². This report shows clearly that there is a certain need for specific support on a Community level.
- 0.3 Since the implementation of the Treaty of the European Union, an important part of promoting European Energy Technologies and concerning the demonstration of the technical feasibility of projects is covered under the provisions of articles 130f and followings. The Commission has therefore integrated this part into its proposal for a 4th RDT framework programme³. The Commission has specified in annex III of the proposed Council decision for a 4th RDT framework programme under action 1 point 5 "Energy"⁴ as well as under action 2 "co-operation with Third Countries"⁵ and action 3 "Dissemination and valorisation of results"⁶ the need for energy technology demonstration such as carried out by the THERMIE programme and its

¹ Council Regulation (EEC)n°2008/90, OJ n°L185/1 of 17.07.1990

² Ref. "Report on the implementation of Council Regulation n°2008/90 of 29 June 1990 (THERMIE Programme)" COM(93) 642 final

³ Ref. proposal of a Council decision doc. COM(93)276 final of 16.06.1993 - p.4

⁴ Ref. proposal of a Council decision doc. COM(93)276 final of 16.06.1993 - p.50

⁵ Ref. proposal of a Council decision doc. COM(93)276 final of 16.06.1993 - p.60 and 61

⁶ Ref. proposal of a Council decision doc. COM(93)276 final of 16.06.1993 - p.63 and 64

Organisations for the Promotion of Energy Technologies as well as by its "Energy Centres" in Central and Eastern Europe.

0.4 THERMIE is supporting projects on the industrial viability of new technologies going beyond the pure technical feasibility. The promotion of European Energy Technologies by the demonstration of their economic viability as well as the promotion of results of similar projects financed by Member States programmes or by the industry alone and assistance to their penetration on markets of Third Countries through industrial co-operation cannot be included in the 4th framework programme and are therefore subject to the present proposal based on art.235 of the Treaty.

0.5 In the following chapters, the Commission specifies the justification for action at Community level, as well as the objectives of this new complementary programme ("THERMIE-II") and the orientations and structure of the new programme.

1 JUSTIFICATION FOR ACTION AT COMMUNITY LEVEL

SUBSIDIARITY

1.1 What are the objectives of the proposed action in relation to the Community's obligations ?

The new Community instrument for providing financial support for the demonstration and dissemination of energy technology 1995/98 will take into account major energy policy objectives which are of vital importance for economic growth and sustainable economic and social development of the EU; such as:

- security of long term energy supply of the Community,
- rational management of energy resources,
- clean use of coal and other fossil fuels,
- diversification of energy supply,
- development of regional energy resources.

Furthermore, the programme will contribute to other major Community's policy objectives due to the achievement of the internal market as well as in

accordance to priorities laid down in the Treaty of the European Union and the 4th Framework Programme concerning increasing the competitiveness of European industry, improving living conditions in cities and rural areas, strengthening economic and social cohesion, and co-operation with Third Countries.

- 1.2 Does competence for the planned activity lie solely with the Community or is it shared with the Member States ?

Competence is shared with Member States.

- 1.3 What is the Community dimension of the problem (for example, how many Member States are involved and what solution has been used up to now) ?

The key objectives of the proposed programme affect all Member States and have pan-European implications - e.g. for the environment, competitiveness, energy supply and international relations. The evaluation report of THERMIE and the appraisal of the Member States support programmes show clearly the necessity for Community action in energy technology demonstration and dissemination⁷. European industry is in many cases capable of developing innovative technologies and promoting their utilisation on its own, without public support. However, as in the USA, Japan and other major industrial competitors, industry (and this applies especially to SMEs) is not always in a position to succeed without the provision of public support, since technical or financial risks may be high, external costs are not included in energy production and consumption and market information may not be readily available or accessible. There is also a significant need for financial assistance in the services, buildings, transport sectors, etc., particularly where they are publicly owned. Up to now, Member States support programmes have been complemented by a series of Community demonstration programmes, the most recent of which is THERMIE.

- 1.4 What is the most effective solution taking into account the means available to the Community and those of the Member States ?

⁷ Ref. "Report on the implementation of Council Regulation n°2008/90 of 29 June 1990 (THERMIE Programme)" COM(93) 642 final

Many Member States have important support programmes of their own, both on a national and a regional level, which may focus on specific energy sectors, technologies or end uses. These programmes have budgets roughly four times greater than the Community's programmes. There is therefore a need, before thinking of Community support, to consider making greater use of the results which are already available from these programmes. This requires improved co-ordination between Community and Member States programmes, which the Community can help to provide. In certain Member States no programmes exist at all, or they may only cover certain specific sectors. Here again, the Community could fill in the gap which exists in some areas. There is, of course, some need for re-orientation compared with previous Community energy technology programmes to ensure that the Community only acts insofar as the objectives of the action could not be adequately achieved by the Member States themselves and where, by virtue of scale or effects, the Community is able to achieve more effective results.

- 1.5 What real added value will the activity proposed by the Community provide and what would be the cost of inaction ?

The added value would be to bridge the gap between energy technology development by industry and Member States on the one hand and promotion of its results for the benefit of the consumers and users (public or private) on the other. The cost of inaction could be poorer coordination, an absence of dissemination of vital technical information and distortions in technical development across the Community to the benefit of richer Member States and more powerful industrial interests.

- 1.6 What forms of action are available to the Community (recommendation, financial support, regulation, mutual recognition, etc.) ?

It is considered that a regulation is the most effective means of achieving the objectives of the proposal by ensuring that all Member States adopt the same approach within the same structure, secure in the knowledge that a budget has been agreed for a pre-defined period of time. A directive or recommendation would clearly be inadequate in achieving this framework of action.

- 1.7 Is it necessary to have a uniform regulation or is a directive setting out the general objectives sufficient, leaving implementation at the level of the Member States ?

A regulation actually makes it easier to run a consistent and fair programme and in this case does not affect Member States' powers to develop their own national programmes.

COHERENCE WITH OTHER COMMUNITY ACTIONS

- 1.8 It is recognised that, in order to be effective, there should be complementarity and coherence with other Community instruments, in particular with Community programmes financed within the 4th RDT framework programme, the structural funds or external aid programmes. Clearly, the energy-policy related programmes for technology demonstration will operate downstream from RDT programmes; so, technology development would have to be fully completed and any risks would be limited to those related to the demonstration of economic viability or wider market penetration.
- 1.9 A Community programme which bridges the gap between energy technology development by industry and Member States on the one hand, and promotion of its results for the benefit of the consumers and users (public or private) on the other hand, must take into account advice from all interested institutions, industry, other companies, customers etc. This can be achieved by means of an Advisory Committee of Member State representatives, and also through advisory groups to the Commission representing professional associations, industry, the tertiary sector and any other relevant decision makers or customers. This would be important for both the decisions on the granting of financial support and for the implementation of support activities.
- 1.10 An important role in this context would be taken by the European network of Organisations for the Promotion of Energy Technology ("OPET-network") set up by the THERMIE Regulation, which brings together a large number of public and private organisations experienced in technology assessments, market penetration and dissemination activities. The role and structure of the network could easily be adapted in order to play an important role in a new "THERMIE" programme. Not only are most of the necessary skills available within this network, but it also respects the principle of subsidiarity, since

these organisations are operating at regional, national and Community level. The network would be supported by informal groups of professional and consumer associations, or regional or national agencies which would bring closer involvement with other relevant actions and would assist the Community in orienting the programme.

2 OBJECTIVES

- 2.1 Security of long term energy supply, the rational use of energy, the clean use of fossil fuels, the diversification of energy supply and the development of regional energy resources are key objectives of Community policy and it is vital for achieving economic growth. These goals will however only be achieved if European industry continues to develop innovative and efficient technologies for both energy production/transformation and for final consumption. But experience has shown that these technologies, once they have been developed, do not always succeed in penetrating the market without some public support; energy efficiency improvements in buildings, solar photovoltaics and IGCC are examples of this. These objectives therefore lie at the heart of the proposed instrument.
- 2.2 A major challenge for overcoming unemployment and for ensuring economic growth in the EU is maintaining the competitiveness of European industry. This will not be possible unless full use is made of innovative and efficient energy technologies. The position of European industry appears not at all as favourable as that of the USA and Japan; as pointed out in COM report (92)2000, the proportion of advanced technologies in European exports is actually decreasing, now being only at the level of 17%, compared with 27% for Japan and 31% for the USA. It is recognised that the developing markets in Asia are large and would benefit from implementing European energy technology. Furthermore, European technologies could even increase their penetration of the USA and Japanese markets. An energy technology promotion programme would therefore be of valuable support for the European initiative in terms of economic growth.
- 2.3 The preservation of energy resources goes in hand with the protection of our environment. In fact, there is no way in which environmental goals will be achieved without widespread implementation of appropriate energy technologies. In the coming decade, technology development and utilisation

can reduce energy consumption significantly, in some cases by more than 50% per unit of output, with a corresponding reduction in pollutant emissions such as CO₂, SO₂, NO_x. This is of vital importance, not only for the EU (meeting the CO₂ stabilisation target), but also for its neighbours in Central and Eastern Europe, and even more for the developing countries who are in the process of dramatically increasing their economic growth.

- 2.4 Clearly the internal market offers significant new opportunities for Member State businesses. However, it also requires companies to be more competitive, and one important means of enhancing competitiveness is the implementation of better, more efficient energy technologies. Technologies successfully developed by companies, often with public support at national or regional level, would be taken up more easily and widely if economic and technical uncertainties and the lack of market transparency could be overcome by Community promotional support; this would in turn add value to the programmes administered by the Member States.
- 2.5 Community policy objectives to strengthen social and economic cohesion and agricultural policy are also met by energy technology promotion. The living conditions of European citizens, in particular in the less favoured regions, can be improved by the utilisation of efficient energy technologies. Improvements in public transport systems, private cars, heating and lighting systems can be achieved through more efficient energy use or through new means; although energy must always be realistically priced, efficient technologies can make energy available at more reasonable price levels to the less favoured regions and thus ensure that they are not excluded from access to these vital services. In fact, energy technology will have a significant impact on societal development and will be an important instrument for strengthening economic and social cohesion in the Community. There are similar considerations which apply to the increased use of modern energy technology in rural areas. Also, the recent reforms of the Common Agricultural Policy could be eased by associated measures, such as the utilisation of land for bio-fuel plantations (bio-methanol, rape-seed, wood, etc.), to provide fuels for use in the transport and buildings sector. Technologies are available now, but, if Europe's rural areas are not to be left out, they need a vigorous push for them to be taken up in the various sectors concerned.

- 2.6 Finally, another major Community policy, external relations, would also benefit from a programme of energy technology promotion. In fact, the international dimension of energy is greater than for any other commodity. Not only initiatives such as the EC-Energy Centres, but also international activity to decrease CO₂ emissions (follow-up to the Rio conference) and help for developing countries to gain access to adequate and clean supplies of energy, would be greatly facilitated by the promotion of European energy technologies. Furthermore, the neighbouring countries of the EU are either significant energy suppliers (Russia, Poland, Norway, Algeria, Gulf etc.), or they have great potential for the utilisation of efficient technologies for energy consumption, transformation and production. The prospect of a number of Central and Northern European Countries joining the Community, and of association agreements with others (Mediterranean countries), increases the necessity for considering them as partners in the new Community programme. THERMIE-II could contribute to successful co-operation in particular through its dissemination action implemented by its OPET-network.
- 2.7 These qualitative objectives could be illustrated by some quantitative targets which THERMIE-II would seek to achieve. For example: a decrease of 2% in the Community's energy imports, thus increasing the security of energy supply, a further increase in energy savings of 20Mt/y, a reduction of 2% in Community CO₂ emissions, etc. These objectives would need to be defined in more detail and measurement criteria must be developed in parallel with the implementation of this new programme.

3 ORIENTATIONS - STRUCTURE OF THE PROGRAMME

- 3.1 In order to successfully meet the above objectives and to complete the demonstration action undertaken within the 4th RDT framework programme, the programme has to be adequately structured and to concentrate on priorities; furthermore it should be defined to face the problems relating to the utilisation of energy technologies, rather than simply the problems of particular individual energy sectors or technologies. Thus the traditional sectoral approach

- Rational use of energy
- Renewable Energy Sources
- Fossil Fuels (Solid Fuels and Hydrocarbons)

will be completed by one related to the use of a technology in order to match with energy policy related problems of the market.

The specific content of the sectors of application will concentrate only on a limited number and follow closely the results of the evaluation of the previous and ongoing Community energy technology support programmes as well as the demonstration of technical feasibility undertaken within the 4th framework programme. The organisation will take into account the basic principle of common action in partnership with industry and Member States administrations. A draft programme for the 3 sectors is attached.

3.2 The content of the programme would work across sectors and would promote technologies by demonstration and dissemination for a specific end-use. Actions eligible for support would be located in one or more of the following areas:

- industry (RUE and final consumption of fuels or energy sources, for heat, power, lighting, etc.);
- energy industry (production/transformation of fuels or energy sources, including exploration and demand-side management action on efficient electricity production and utilisation);
- tertiary sector : buildings and domestic sector (including services and administration: RUE, solar thermal, electricity, etc.), transport sector (RUE, bio-fuels, electricity, solar PV, etc.), urban energy systems (CHP, district heating, traditional energy sources combined with new ones - geothermal, biomass, wind, clean use of coal, gas, etc.);
- rural energy systems (biomass plantations), isolated areas (islands, mountains and peripheral regions: Renewable Energy Sources).

Targeted projects and programmes with a Community-wide dimension would be a suitable instrument to assess economic viability and allow for major breakthroughs in the utilisation of advanced and efficient European energy technologies. Likewise, THERMIE-II has to allow continuing support to SMEs, and would support small projects with good replication potential in the Community.

3.3 The type of support would be granted accordingly to the need for public action:

- Support for demonstration projects: - to cover the risk of economic viability for the demonstration of a first commercial size project in a country or region or of a technology which has not yet been introduced on the market in the same economic conditions; dissemination through projects promoting energy technologies with a view to their broader utilisation.
- Measures for energy technology promotion (dissemination, technology transfer, market assessment, information, advice, etc.) in particular of results of Community or Member States' support programmes or of similar technologies developed by industry without public support and on the same state of insufficient market penetration.
- Energy technology transfer and industrial co-operation with Third Countries and international organisations.
- Horizontal support measures: Co-ordination of policies, evaluation of programmes and administrative support.

The proportion of expenditure for these various types of support will be defined in consultation with the advisory committee and according to the annual budget provisions.

3.4 Projects should generally involve several companies from several Member States (except for certain specific cases, to be defined).

3.5 The amount of project support should be limited as in the past to 35% of the eligible costs. For Measures and co-operation with Third Countries, it would be between 50% and 100%. Costs for horizontal measures should be fully covered (100%).

3.6 Financial resources: the duration of the programme should be 4 years to be in line with the demonstration activity of the 4th framework programme and to allow time for results to come through, for a good and efficient organisation and for the programme's objectives to be achieved. The level of finance foreseen for 1995 in the context of funds available under Heading 3, other than those allocated to the 4th Framework Programme RTD is 30 MECU. The level of finance for 1996-98 will be decided, outside the resources

allocated to the 4th Framework Programme RTD, in the light of the revision of the budget estimates and defined in the framework of the annual budgetary procedure to an adequate extent to ensure that the programme is carried out in a coherent manner until its conclusion. The geographical coverage of the THERMIE-II programme would thus be focused on the Community's internal market, but would allow for a limited action to be implemented in neighbouring regions (Central and Eastern Europe, Northern Europe, candidate countries for EU membership, Southern Europe and the Mediterranean, as well as some specific actions for important Third Country markets).

3.7 Eligibility criteria for projects would be:

- existence of financial risks in demonstrating viability of a energy technology;
- no possibility of Member State sufficient financing and support;
- increase in security of long term energy supply of the Community;
- preservation of energy resources and of the environment;
- improved competitiveness of European industry.

Additional criteria would be as in the existing THERMIE programme the "Community dimension" (several proposers from different countries), the size of undertakings (SMEs) and projects from regions whose development is lagging behind. Every year priorities would be defined by the Commission (assisted by the advisory groups) and in agreement with the Advisory Committee of Member State representatives.

- 3.8 If the programme is to be effectively organised and implemented and the objectives achieved, then there must be a careful examination of the complementarity of THERMIE-II with other Community financial instruments: those "upstream", for R&D and energy programming; those "downstream", for energy policy (SAVE, ALTENER), regional policy, external policy and co-operation (PHARE/TACIS, Co-operation agreements and EDF) and finally those of the European Investment Bank, other financial institutions (e.g. EBRD), other international organisations or instruments such as the European Energy Charter. Co-ordination with Member State programmes will be most effectively ensured, as up to now, through an Advisory Committee.

3.9 Organisational aspects. The projects will be selected following an annual call for proposals to be published in the Official Journal. Practicable procedures will be developed with assistance of Member States through the THERMIE Committee.

3.10 In order to facilitate the administration of the programme and to respect as far as possible the principle of subsidiarity, the Commission would continue to have recourse to public or private organisations involved in energy technology promotion in the Member States (OPET). The OPET-network would also play an increasing role in the organisation, preparation and management of promotional measures and as far as possible in projects. Professional associations would also be involved in these aspects on an informal basis and at low cost. All interested services of the Commission should assist in the decision-making process, depending on their interest and competencies. The potential involvement of the European Investment Bank in this programme should also be examined.

4 BUDGET - PROVISIONS

4.1 The budget will be determined by the budgetary authority in the light of available resources in the framework of Heading 3 of the budget.

The indicative allocation of the amount between the different mechanisms of support as defined under point 3.3 will be

- project support in the EU
- promotional measures in the EU
- co-operation with Third Countries
- horizontal support measures

This indicative allocation is based on the findings of the THERMIE evaluation report showing the need for wider replication of results of existing technology programmes as well as due to the fact that the closeness to the market of demonstration of economic viability calls for intensive promotional measures.

4.2 The annual allocation for the different fields and area of application will be fixed annually accordingly to the potential of proposals and in consultation with the Advisory Committee.

**COUNCIL REGULATION (EC) No. .../...
OF .../....**

**CONCERNING A COMMUNITY PROGRAMME PROVIDING FINANCIAL SUPPORT FOR THE
PROMOTION OF EUROPEAN ENERGY TECHNOLOGY 1995-1998 ("THERMIE-II")**

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 235 thereof,

Having regard to the proposal from the Commission⁽¹⁾,

Having regard to the opinion of the European Parliament⁽²⁾,

Having regard to the opinion of the Economic and Social Committee⁽³⁾,

Whereas pursuant to Article 3(t) of the Treaty the activity of the Community shall include measures in the spheres of energy,

Whereas in its resolution of 16 September 1986 concerning new Community energy policy objectives for 1995 and convergence of the policies of the Member States⁽⁴⁾ the Council stated that, possible short-term fluctuations on the energy market apart, efforts made must be maintained and, if necessary, reinforced between now and 1995 and beyond that date in order to reduce to a minimum the risk of tension at a later date on the market;

Whereas that same resolution states that one of the horizontal objectives of Community energy policy is to encourage continuous and reasonably diversified promotion of technological innovations and appropriate dissemination of the results throughout the Community; whereas in spite of the present energy situation there should be no relaxation of efforts to diversify the Community's energy supply and improve energy efficiency; whereas the promotion of new technologies will help to achieve these objectives and to ensure better protection of the environment from the impact of energy technologies;

(1) COM(93) 642 def., of 9 December 1993.

(2)

(3)

(4) OJ No C 241, 25.09.1986, p.1.

Whereas it is important to dovetail these efforts with the Community strategy for science and technology and with the specific programmes in particular the activity concerning demonstration of clean and efficient energy technologies defined in the 4th framework programme for Community activities in the field of research and technological development, both in terms of programme execution and in terms of the financial status of the programme in the financial perspective;

Whereas the resolution of 16 September 1986 also states that the Community should search for balanced solutions as regards energy and the environment by making use of the best available economically justified technologies;

whereas under Article 130r of the Treaty environmental protection requirements are to be a component of the Community's other policies and action by the Community relating to the environment must be designed to ensure a prudent and rational utilisation of natural resources; whereas energy technology has a key role to play in meeting the ecological challenge by increasing energy efficiency, developing new and renewable sources and ensuring the clean use of solid fuels: whereas major efforts in all these areas will be needed to face up to the threat of climatic change;

Whereas the promotion of projects for exploiting the indigenous energy potential of the regions, particularly less-developed regions, will help to strengthen the economic and social cohesion of the Community, an objective which, according to Article 130b of the Treaty, should be taken into account when implementing common policies and the internal market;

Whereas support for the promotion of energy technologies will benefit economic and social cohesion;

Whereas action to promote innovative technologies taken at Community level will avoid the dissipation of resources and increase effectiveness;

Whereas this action should be co-ordinated with action being taken by the Community within the framework of other specific programmes and which includes the activities of demonstration of technical feasibility of projects, of the promotion of co-operation with Third Countries and of dissemination and optimisation of results of activities in Community RTD;

Whereas financial support should be granted in appropriate cases to projects for the promotion of advanced technology in the field of energy;

Whereas it is appropriate to promote the market penetration of projects likely to be rapidly absorbed by the market but also of projects - particularly in the field of renewable energy - which, although they might have less rapid access to the market, are of great interest in the long term in terms of energy supply, environmental protection and employment;

Whereas, when selecting projects, equal preference should be given to projects involving the association of independent undertakings established in different Member States; in projects proposed by small and medium-sized enterprises and in dissemination projects; whereas these projects, if selected, must benefit from increased Community support;

Whereas the Commission must pursue its efforts to simplify and expedite tendering and selection procedures and to make them more transparent, with a view to furthering the implementation of the programme and easing the steps that must be taken by undertakings, particularly SMEs, to participate in projects for the promotion of energy technologies;

Whereas for reasons of effectiveness it is necessary to make provision for a programme of four years duration with appropriate overall funding;

Whereas it is necessary to estimate the Community finance needed to implement this programme; whereas that amount must be covered by the financial perspectives defined by inter institutional agreements; whereas the appropriations actually available will be determined under the budgetary procedure in compliance with the said agreements;

Whereas the overall level of Community effort in the field of non-nuclear energies, including measures falling within the scope of the fourth framework programme, cannot be lower in real terms than it has been over the previous corresponding period;

Whereas, notwithstanding the new impetus that the promotion of innovative energy technologies requires, the continuity of measure undertaken under promotional schemes and demonstration projects and industrial pilot projects in the energy field referred to by Regulation (EEC) No 2008/90⁽⁵⁾, 3640/85 and the programme of

(5) OJ No L 185, 17.07.1990, p.1

support for technological development in the hydrocarbons sector referred to in Regulation (EEC) No 3639/85 must be ensured in accordance with this Regulation; whereas such continuity must be achieved on the one hand through the pursuit of measures to promote and disseminate technologies that have received Community support under such Regulations; whereas it may also be achieved through support for the later stages of projects that have already received partial support under the same Regulations; whereas it must be possible in certain cases to support projects of the same sort as those covered by these Regulations provided they also fulfil the requirements of this Regulation;

Whereas co-operation between undertakings in various Member States in the field of energy technology must be maintained and encouraged;

Whereas technology transfer in the energy sector could contribute significantly to more efficient energy production and the reduction of pollutant emissions in the less favoured areas of the Community and in Third Countries;

Whereas such technology transfers should therefore be encouraged both within the framework of existing Community programmes and by any other appropriate means;

Whereas the grant of Community support must not affect conditions of competition in such way as to be incompatible with the competition provisions of the Treaty;

Whereas the present programme must be subjected to a mid-term review and a final evaluation, to be conducted by independent experts;

Whereas this regulation is based on Article 235 of the Treaty;

Having regard to the Community's commitment under the International Convention on Climate Change to participation in an international action to reduce the risks attached to emissions of pollutants, particularly CO₂;

Whereas, in order to meet these objectives, the Community must embark on a vigorous plan of action involving co-operation with developing countries which lack access to modern production and rational use of energy technologies;

Whereas, of these countries, it is now *inter alia* in those in the Pacific Rim and Latin American countries that a rise in emissions will be inevitable unless preventive action is taken;

HAS ADOPTED THIS REGULATION:

Article 1

The Community may, under the conditions laid down in this Regulation, grant financial support for projects for the promotion of energy technology (THERMIE 1995-1998) in the fields of application referred to in Article 3 and undertake the promotional activities referred to in Article 4.

Article 2

1. For the purposes of this Regulation, 'projects for the promotion of energy technology', hereinafter referred to as 'projects', means projects which are not eligible for the specific programmes of the 4th Framework Programme and which are designed to advance, implement and/or promote innovative technologies in the field of energy, implementation of which entails a large element of economic risk, such that those projects would in all likelihood not be executed without Community financial support.
2. Community financial support may be granted for projects designed to promote with a view to their broader utilisation, either under different economic or geographical conditions or with technical modifications, innovatory techniques, processes or products which have already been applied once but, owing to residual risk, have not yet penetrated the market.

Article 3

The fields of application of this Regulation are selected areas of:

- rational use of energy,
- renewable energy sources,
- clean combustion of solid fuels,
- hydrocarbons.

Annex I lists the sectors of application covered by each of these fields. The contents of this Annex may be amended to keep pace with technological developments in accordance with the procedure defined in Article 9 paragraph 1, the European Parliament and the Council being kept informed.

Article 4

The Commission might undertake promotional actions, such as those defined in Annex II, designed to encourage the application and market penetration of energy technologies. To that end the Community may provide technical and financial support for bodies that promote innovative technologies in the Member States. A list of these measures appears in Annex II, the contents of which may be amended in accordance with the procedure defined in Article 9 paragraph 1.

These promotional actions may be carried out in Third Countries in so far as such extension is in keeping with the objectives of this Regulation.

Article 5

1. Any project within the meaning of Article 2 must meet the following conditions:

- (a) it must use, with a view to their implementation and propagation, innovative techniques, processes or products, or a new application of established techniques, processes or products;
- (b) it must offer economically viable prospects of subsequent commercial exploitation of the relevant technology;
- (c) it must offer appropriate solutions compatible with safety and environmental protection requirements;
- (d) it must be difficult to finance because of major economic risks;
- (e) it must be proposed by natural or legal persons capable, in the case of the techniques, processes or products referred to in (a), of implementing and applying them, and of contributing to or assisting in the dissemination thereof;

- (f) in the case of any project of a total cost of ECU 2 million or more, it must be submitted by at least two independent promoters established in different Member States.

However, exceptions may be agreed for projects submitted by a single promoter if their implementation would be of particular interest to the Community;

- (g) it must be carried out within the Community unless it is essential to the interests of the Community to have all or part of it carried out in an area outside the Community, in particular because of the special characteristics of the project.
- (h) it must be carried out outside the Community if such an action is necessary to meet the Community's commitments under the International Convention on Climate Change.

2. Additional conditions specific to the sectors of application are given in Annexes I and II.

3. When selecting projects, as an adjunct to the criteria laid down in paragraphs 1 and 2, it shall take account of a preference to be given to projects with the following characteristics:

- (a) projects, other than those referred to in paragraph 1(f), involving an association of a least two independent undertakings established in different Member States, provided that it is established that each undertaking can make an effective and significant contribution to carrying out the project;

- (b) projects proposed by small and medium-sized undertakings or by an association of such undertakings;

- (c) projects which are to be implemented in regions whose development is lagging behind as defined by Article 8 of Regulation (EEC) No 2052/88⁽⁶⁾.

⁽⁶⁾ OJ No L 185, 15.07.1988, p.9.

Article 6

1. Support for a project shall take the form of a financial contribution by the Community granted in accordance with the conditions set out in the paragraphs below and in Articles 7, 11 and 14.
2. Financial support may be granted for an entire project or for different stages of a project. In the latter case, without prejudice to the responsibilities conferred upon the budgetary authority of the European Communities, financial support may continue to be granted for later stages of the same project provided that the eligibility criteria continue to be met and that the Commission is satisfied with the progress of the project.
3. Financial support may not exceed 35% of the eligible cost of the projects referred to in Article 2.
4. The amount of financial support shall be determined separately for each project. When determining the amount, one takes account of the element or proportion of the risk which will have to be borne directly by those responsible for the project and of other support received or expected, in such a way that the total amount of public support does not exceed 49% of the total cost of the project. To this end, the person responsible for the project shall be obliged to inform the Commission of any public aid expected or received.
5. Whenever specifically required, a decision could be made to set up other appropriate financial mechanisms according to the procedure referred to in Article 9 paragraph 1.

Article 7

1. Projects shall be submitted by natural or legal persons established within the Community, whether individually or in the form of associations, following the publication of an invitation to submit projects in one or more of the fields of application referred to in Article 3 in the *Official Journal of the European Communities*, in accordance with this Regulation. This invitation could be preceded by an invitation from the Commission encouraging or coordinating the launch of specific projects, called "targetted projects", whenever a technological gap exists in a specific area or significant progress could be achieved through

cooperation between individuals, companies or other bodies established in at least two different Member States.

2. In the invitations to submit projects, the Commission shall specify those sectors to be given priority when projects are selected; this list of priorities shall be drawn up in accordance with the procedure defined in Article 9 paragraph 1. The Commission shall also specify the information applicants will be required to supply for the purposes of the selection of projects.

Article 8

1. The Commission shall be responsible for applying this Regulation.
2. The procedure referred to in Article 9 paragraph 1 applies to:
 - (a) the amendment of the contents of Annexes I and II;
 - (b) the establishment of priorities for invitations to submit projects;
 - (c) the selection of projects, including the fixing of the rate of financial support, for every project or promotional action with a total cost exceeding ECU 500,000;
 - (d) any institution of financing mechanisms in the sense of Article 6 paragraph 5.
3. The procedure referred to in Article 9 paragraph 2 applies to the selection of projects and promotional actions, and to the fixing of the rate of financial support for every project or promotional action, with a total cost exceeding ECU 100,000 but not exceeding ECU 500,000.

Article 9

1. In carrying out the tasks referred to in Article 8 paragraph 2, the Commission shall be assisted by a committee composed of the representatives of the Member States and chaired by the representative of the Commission.

The representative of the Commission shall submit to the committee a draft of the measures to be taken. The committee shall deliver its opinion on the draft within a time limit which the chairman may lay down according to the urgency of the matter. The opinion shall be delivered by the majority laid down in Article 148(2) of the Treaty in the case of decisions which the Council is required to adopt on a proposal from the Commission. The votes of the representatives of the Member States within the committee shall be weighted in the manner set out in that Article. The chairman shall not vote.

The Commission shall adopt measures which shall apply immediately. However, if these measures are not in accordance with the opinion of the committee, they shall be communicated by the Commission to the Council forthwith.

In the event, the Commission shall defer application of the measures which it has decided for a period of one month from the date of communication.

The Council, acting by a qualified majority, may take a different decision within the time limit referred to in the previous paragraph.

2. In carrying out the tasks referred to in Article 8 paragraph 3, the Commission shall be assisted by a committee composed of the representatives of the Member States and chaired by the representative of the Commission.

The representative of the Commission shall submit to the committee a draft of the measures to be taken. The committee shall deliver its opinion on the draft, within a time limit which the chairman may lay down according to the urgency of the matter, if necessary by taking a vote.

The opinion shall be recorded in the minutes; in addition, each Member State shall have the right to ask to have its position recorded in the minutes.

The Commission shall take the utmost account of the opinion delivered by the committee. It shall inform the committee of the manner in which its opinion has been taken into account.

Article 10

1. In the application of the current Regulation, the Commission ensures co-ordination with programmes implemented by the Community in the framework of other specific programmes and should include demonstration of the technical viability of projects, the promotion of co-operation with Third Countries, relevant activities of the EIB and EBRD as well as dissemination and optimisation of the results of activities in field of Community RTD.
2. In addition, it shall ensure closer co-ordination with national schemes in order to avoid duplication of similar projects.

Article 11

1. The contractor responsible for carrying out a project receiving financial support from the Community shall undertake to use the successful technique, process or product or to facilitate its use, and to allow dissemination of the results obtained.
2. The Commission shall, in co-operation with the bodies responsible in the Member States, endeavour to ensure the dissemination and application of projects supported in accordance with this Regulation and to promote their exploitation. It shall take appropriate steps to achieve this objective in connection with the promotional actions referred to in Article 4.

Article 12

Contracts signed between the Community and the persons referred to in Article 14 for the implementation of the projects and promotional actions adopted under this Regulation, shall govern the rights and obligations of each party, including the methods of dissemination, protection exploitation of the results of the projects and complete or partial repayment of the financial support in the event of non-compliance with contractual obligations.

Article 13

Subject to Article 11, the information obtained by the Commission under this Regulation shall remain confidential.

Article 14

Responsibility for any project shall lie with a physical or legal person constituted in accordance with the law applicable in the Member States, or with an association of such persons, within they are jointly and severally liable, in so far as the law applicable in the Member State permits.

Article 15

Financial support granted by the Community must not affect conditions of competition in such a way as to be incompatible with the relevant provisions of the Treaty.

Article 16

Two years after the entry into force of this Regulation and also upon expiry thereof, the Commission shall submit a report on the implementation of this Regulation, in particular on the compatibility between national and Community action, to the European Parliament and to the Council for the purposes of assessing the results obtained, together with the external evaluation by independent experts on which it will be based.

Article 17

The appropriations necessary to the implementation of this Regulation shall be entered each year in the general budget of the European Communities.

The appropriations shall cover the financial support to be granted to projects referred to in Article 2, the financing of the actions referred to in Article 4 and other expenditure necessary to the implementation of this Regulation.

Article 18

Regulation 2008/90 shall continue to apply to projects and measures which support has been granted pursuant to those Regulations.

Article 19

The Regulation shall enter into force on 1 January 1995.

It shall apply until 31 December 1998.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at ...,

*For the Council
The President*

ANNEX I

LIST OF SECTORS OF APPLICATION

The fields of application in Article 3 cover the sectors listed below.

1. RATIONAL USE OF ENERGY

Financial support will focus on the following sectors of application:

Transport;

Building;

Industry;

Energy Industry.

1.1 TRANSPORT

Projects must lead to a substantial improvement on the overall efficiency as well as a reduction on emissions, CO₂ and other atmospheric pollutants, through technical improvements on traffic conditions and vehicles. Preferences are given to fleets of vehicles for public transportation, including urban freight delivery vehicles.

Two areas of projects can be considered:

a) RUE applications:

- Projects related to the promotion of innovative fleets of vehicles. (New designs, new fuels: CNG, LPG, biofuels, diesel-electric ...)

b) Energy substitution applications:

- Projects related to the promotion of new fuels infrastructure and distribution systems. (Rapid and slow charging units, O+M special requirements)
- Projects related to the technical adaptation of vehicles to new fuels.

1.2 BUILDINGS

Projects must lead to a substantial reduction in energy consumption according to standards and substantial reduction of emissions and pollutants in building stocks through integrated technical and economic improvements. Preference will be given to projects with clear integration of design, materials and equipments with loads control and management.

a) RUE applications:

- Projects related to the promotion of rehabilitation of buildings.
- Projects related to the promotion of new integrated designs for new buildings.
- Projects related to the promotion of new cooling systems (without CFCs).
- Projects related to technologies outwith of combined production of heat and electrical power, for example fuel cells.

1.3 INDUSTRY

- Heat recovery using new heat exchanger concepts for high polluted exhausting gases or new kiln designs for a best use of heat in the chamber(s). Combustion of exhausting gases with later use of heat produced can be also considered as well as CHP schemes improving the reliability of the equipment or incorporating new approaches for the use of the flue combustion gases.
- Technologies for the recovery of energy form industrial wastes through the production of by-products to be used as derivated fuel or direct energy production. Solutions to eliminate possible negative environmental impact have to be incorporated.
- Improvements of industrial processes reducing specific energy consumption, where this has an important weight in the total benefits of the project.
- Technical solutions for a best use of the electricity, especially in the peak load periods. Automation of process could be also considered, using

standard and modular solutions easily replicable or new approaches, such as predictable and adaptable systems.

1.4 ENERGY INDUSTRY

Advanced combustion burners, integrating solutions to save energy and reduce the environmental impact, as well as efficient cooling towers with lesser maintenance costs and reduced environmental impact. These solutions should be mainly addressed to the re-powering of existing plants.

Advanced systems to transport the heat produced in the District Heating schemes either to reduce the cost of the installation or to decrease the energy losses in the distribution or through the heat exchangers.

Fuel cell stacks to provide electricity more efficiently and with less environmental damage.

Technical solutions to reduce the electricity consumption in power plants, that could be also used to get a most flexible operation in hydro pump/turbine schemes. Reduction of losses and increase of quality in the transport and distribution of electricity should be also considered.

2. RENEWABLE ENERGY SOURCES

Financial support will focus on the following sectors of application::

Energy from biomass and waste;

Solar energy;

Wind energy;

Hydroelectric energy;

Geothermal.

2.1 ENERGY FROM BIOMASS AND WASTE

a) Projects aiming at improving competitiveness of biomass as fuel :

- Activities aiming at improving the productivity of energy crops and harvesting and transformation technologies ;

- activities aiming at improving and upgrading biomass conversion technologies for energy production and use (production and use of liquid, solid and gaseous fuels, production of heat and/or electricity) ;
 - activities aiming at reducing the costs for providing the energy produced from biomass (reduction of specific investment costs, rationalisation of production technologies...).
- b) Projects aiming at the energy use of vegetal, animal, urban and industrial waste:
- activities for the upgrading of waste which have a significant impact on the production, substitution of energies or on energy savings aiming at the reduction of the costs of the energy produced.
- Projects must comply with the guidelines of community environment and agricultural policies.

2.2 SOLAR ENERGY

a) Photovoltaics

Objectives:

Dissemination of photovoltaics processes to supply electricity for :

- groups of houses, villages ;
- buildings, with architectural integration of PV modules into roofs and/or facades ;
- means of telecommunication, warning, signalling, water pumping, water purification, desalination, etc... ;
- distribution from PV central power stations.

b) Thermal applications

Objectives:

Dissemination of techniques which relate to optimal technical and economic integration of active solar energy systems with efficient conventional systems, with guaranteed results for an overall improved reliability, used for :

- production of large quantities of hot water (or other fluids) for heating and/or cooling applications ;
- production of large quantities of hot air for ventilation or drying applications.

2.3 WIND ENERGY

Objectives:

- Dissemination of the results obtained from previous R&D programmes, in order to assist market penetration, encourage European industry, and promote the transfer and broader use of advanced technology, particularly in the less developed countries of Europe.
- Dissemination and popularisation of the use of wind energy conversion systems tailored to the specific nature of the markets in the different Member States by wind turbines of a wide range of nominal capacity.
- Dissemination of techniques with minimum effect to the environment, namely reduced noise, minimum land use and improved aesthetic impact that will lead to an increased public acceptability.

2.4 HYDROELECTRIC ENERGY

Objective:

Dissemination of techniques aimed at the production of electricity for a public network or for private use in low-power plants.

Fields of application :

- Projects (targeted) aimed to bring together industrial partners to carry out high quality, reliable and competitive standard equipment in order to promote the creation of, or the penetration into new markets.
- Projects (targeted) aimed to perfect simple, reliable and cheap techniques or technology, especially those adapted to the markets and needs of countries whose development is lagging behind.
- Rehabilitation or modernisation of abandoned sites or those which are approaching the end of their technical or administrative lives, by the use of high performance of State of the art technologies (best quality/price).

All projects must take into consideration existing and foreseen environmental protection measures.

2.5 GEOTHERMAL

Objective:

To promote, through dissemination actions, the utilisation of already located important geothermal resources, not yet exploited, bearing in mind economic and environmental aspects, and security of supply.

Fields of application:

- techniques in the drilling sector, wellhead equipment, corrosion, scaling, automation and the treatment systems for brine waters ;
- exploitation of geothermal fields where the resources are proven, in order to reduce the mining risk;
- Development of geothermal applications in agriculture, aquaculture and water desalination, thus helping the regions affected by the modifications of the common agricultural policy.

3. CLEAN COMBUSTION OF SOLID FUELS

All type of Fluidised Bed Combustion (FBC) should be now spread around in the Community: small and large FBC are now reaching the industrial maturity and it will be effective to use them more and more. They have not to be limited to a type of fuel. But on the contrary, their ability to use a wide range of fuel should be taken into account in order to disseminate this technology. Therefore, use of bituminous coal, lignite, peat, rest coals, wastes, biomass, RDF, and all type of carbonaceous materials should be encouraged - alone or in mixture - to be burned in FBC.

FBC should be promoted to produce electricity, and also to be used in CHP generation.

4. HYDROCARBONS

Objectives:

The programme should strengthen the industry capability to answer the short and long term requirements for the availability of efficient technologies in the field of oil and natural gas. The Community effort is therefore aiming at :

- the dissemination of technologies for assisting market penetration. Special attention (including co-operation projects) will be given to market penetration in the PECO and CIS.

Beneficiaries would be mainly oil and gas related companies which are developing and promoting innovative and effective technologies to improve the exploration, production, transportation and use of hydrocarbons, preference being given in the selection of projects to those proposed by SMEs.

The fields of application in the upstream sector will be the dissemination of :

- tools and methods for enhancing exploration capability, particularly towards difficult and complex targets as the North Sea and for maximising recovery rate ;
- new technologies for marginal fields exploitation, notably for gas fields resulting in increased production from those reservoirs characterised by difficult economic conditions ;
- safety and the environmental protection systems in exploration and production, particularly for the Offshore sector ;
- new and efficient LNG production and transport systems in view to diversify the supply.

ANNEX II

PROMOTIONAL ACTIONS FOR ENERGY TECHNOLOGIES

1. OBJECTIVES

Encouraging the application and market penetration of energy technologies as referred to in Article 4 requires the undertaking of actions by the Community. Such actions are to be undertaken only in so far as market conditions require it and as they are in keeping with the objectives of this Regulation.

Community support for actions may therefore be granted in order to meet energy policy and other related objectives set out by the Treaty on European Union, in particular concerning:

- Increased utilisation of the industrial potential of energy technology development and improving the technological base of European industry, in particular for SMEs;
- Encouraging European industry to become more competitive by exploiting technology development and market potential to the full;
- Protecting and improving the quality of the environment by the rational use of energy resources, the use of renewable energy sources and clean energy technologies and reducing harmful emissions;
- Technology transfer into less developed regions in Europe and exploitation of the local energy potential;
- Improved working conditions and employment opportunities by the use of innovative and efficient energy technologies developed and supplied within the Community;
- International cooperation facilitating economic and social development of developing countries.

2. TYPE OF ACTIONS

The actions referred to in Article 4 include:

2.1 COORDINATION with national schemes and other Community programmes related to energy technology in order to avoid duplication of similar actions and to ensure fully the application of the principle of subsidiarity for Community action, and in particular through:

- a. Systematic exchange of information about national support schemes;
- b. Programme evaluation activities carried out jointly;
- c. Definition of objectives and implementation of strategies for energy technology promotion;
- d. Monitoring the achievement of objectives.

2.2 INSTRUMENTS of Community action:

- a. Analysis of the features and evaluation of the potential of the market for the application of energy technologies and their market penetration (including technologies for demand side management, sectoral diagnosis, feasibility studies).
- b. The dissemination of information on European energy technologies, their further promotion and the dissemination of the results of public funded projects by the organisation of events (technical workshops, seminars, conferences, project site visits, exhibitions), participation in technical fairs, the production of documentary material etc., as far as the undertakings' contractual obligations do not provide for it or the undertakings concerned are not able to carry them out by themselves.
- c. Advice and promotional activities to guide the development of actions undertaken, ensure the wider penetration of efficient energy technologies and address barriers in the market.
- d. Training of staff involved in management or technical applications of innovative energy technologies.

e. Development of appropriate financial mechanisms.

The instruments detailed above will be structured in synergy with the corresponding instruments foreseen in the 'non-nuclear energy' programme of the fourth framework programme of research, technological development and demonstration, in the context of 'PLANS TO FACILITATE MARKET ACCESS' for the various technologies covered by the present programme.

2.3 Recourse to public or private Organisations cooperating in the above activities for the Promotion of Energy Technologies ("OPET") in particular by using the OPET Network.

2.4 Recourse to the above activities with a view to industrial cooperation with third countries, providing guidance for Community aid programmes and achieving optimal use of energy technologies inside and outside of the Community.

3. IMPLEMENTATION

As referred to in Article 9 of the Regulation, the implementation of the measures will be carried out in close cooperation with Member States by the Committee which will assist the Commission in the definition of the programme, the establishment of the priorities for action, the decision of granting financial support and the evaluation of results.

ANNEX II (bis)

Without prejudice to the provisions of Article 3, the various sectors concerned will be given support in the following proportions:

- | | |
|-----------------------------------|------|
| - rational energy use | 45 % |
| - renewable energy sources | 35 % |
| - clean combustion of solid fuels | 13 % |
| - hydrocarbons | 7 % |

FINANCIAL STATEMENT

1. **Title of operation** Promotion of European Energy Technologies ("THERMIE-II")
2. **Budget heading involved** B.4.1000
3. **Legal basis** Council Regulation to be adopted in 1994
4. **Description of operation**
 - 4.1 *General objectives:* Financial support for promotional projects and measures for larger market penetration of energy technologies
 - 4.2 *Period covered:* 4 years, 01.01.1995 to 31.12.1998 (in parallel to the 4th Framework Programme)
5. **Classification of expenditure or revenue**
 - 5.1 *Compulsory/Non-compulsory expenditure*
 - 5.2 *Differentiated/Non-differentiated appropriations*
 - 5.3 *Type of revenue involved:* No
6. **Type of expenditure or revenue**
 - *100% subsidy:* for some associated measures to be carried out by independent experts (consultant firms)
 - *Subsidy for joint financing with other sources in the public and/or private sector:* for all projects and most of the associated measures, in particular for those carried out in co-operation with Member States Agencies
 - *Interest subsidy:* subject to further discussion in energy working group
 - *Other:* some service contracts (in particular for some associated measures)
 - *Should the operation prove an economic success, is there provision for all or part of the Community contribution to be reimbursed?:* No
 - *Will the proposed operation cause any change in the level of revenue? If so, what sort of change and what type of revenue is involved?* No
7. **Financial impact**
 - 7.1 *Method of calculating total cost of operation (definition of unit costs)*

The amount of 30 MECU for 1995 covers financial support for demonstration of economic risks of promotion of energy technologies as defined in art. 2 b) of Council regulation 2008/90 ("dissemination projects") as well as in its art. 5 ("associated measures"). As this type of **projects** is closer to the market and subject of different economic or geographical conditions, it is in particular relevant for the sector of rational use of energy. The level of finance appropriate for 1996-1998 will be decided in the light of available funds in Heading 3 of the budget.

The experience made today through the THERMIE Programme shows that there is a need for support in the sectors in the following proportions:

- Rational Use of Energy 45%
- Renewable Energy Sources 35%
- Clean use of Solid Fuels 13%
- Hydrocarbons 7%

Again, as experience made with the THERMIE regulation shows, not only project support is required. In fact, many efficient technologies have been developed by the industry, whether with EC or MS support or not, and the aims of larger market penetration can most effectively be achieved by *dissemination measures*.

Finally, around 13% of funding is necessary for economic analysis, evaluation of projects and support programmes, including those of the Member States in order to orientate the Community activity and to ensure subsidiarity of action, as well as for administrative support.

7.2 Itemised breakdown of costs

Breakdown	Budget year 95
Projects	11
Dissemination measures	15
Strategy, Evaluation, Administrative Support	4
TOTAL	30

7.3 Indicative schedule of appropriations

7.3.1 Schedule for proposed new operation

	1995	1996	1997	1998	TOTAL
Commitment appropriations	30	p.m.*	p.m.*	p.m.*	p.m.*

(* pro memoria)

The level of finance foreseen for 1995 in the context of funds available under Heading 3, other than those allocated to the 4th Framework Programme RTD is 30 MECU. The level of finance for 1996-98 will be decided, outside the resources allocated to the 4th Framework Programme RTD, in the light of the revision of the budget estimates and defined in the framework of the annual budgetary procedure to an adequate extent to ensure that the programme is carried out in a coherent manner until its conclusion.

8. Fraud prevention measures; results of measures taken

9. Elements of cost-effectiveness analysis

9.1 Specific and quantifiable objectives; target population

- *Specific objectives: links with general objective:* Energy Policy, increase of Energy Supply Security and improved Energy Efficiency.

Support of about 150 projects and 300 associated measures per year which, following the recent experience with the ongoing THERMIE Programme would produce the following results for each ECU spent on a project:

- 425 kg of oil equivalent saved or substituted
- 1650 kg avoided CO₂ emissions
- 12 kg avoided SO₂ emissions
- 4 ECU increase of the Community GDP

(See also attachment):

- *Target population: distinguish as applicable for each objective; indicate the end-beneficiaries of the Community's financial contribution and the intermediaries involved:* industry and other SMEs.

9.2 Grounds for the operation

- *Need for Community financial aid:* many significant technology break through would not happen in the EC; some Member States have no similar programme.
- *Choice of ways and means*
 - *advantages over possible alternatives (comparative advantages):* more immediate effect than regulatory measures, better effect than R&D measures.
 - *explanatory reference to similar Community or national operations:* THERMIE 1990/94, UK Best Practice Programme, FR and DE Demonstration Programmes.
 - *spin-off and multiplier effects expected:*
 - Generation of potential investment of about 1,000 MECU in total, based on results of Cost Benefit Analysis of THERMIE 1990-1992.
 - Job creation potential of tens of thousands of jobs, depending on success of replication.
 - Promotion of European technologies on third country markets.
- *Main factors of uncertainty which could affect the specific results of the operation:* the successful projects are generally replicated several times by industry or Member States Institutions. The associated measures contribute to a larger use by industry of technologies developed by industry or Member States programmes and which otherwise would not sufficiently penetrate the market.

9.3 Monitoring and evaluation of the operation

- *Performance indicators selected:* achievement of technology improvements (e.g. tonnes of oil equivalent saved or substituted, tonnes of CO₂ avoided, number of projects generated, etc.)
- *Details and frequency of planned evaluations:* Yearly
- *Assessment of the results obtained:* The Regulation foresees 2 exercises by independent evaluations examining project files, making project visits, controlling replications and assessing complementarity with Member State programmes, one two years after the entry into force, the other on expiry of the Regulation. The Commission will submit these reports to the European Parliament and the Council.

9.4 Coherence with financial programming

- *Is the operation incorporated in the DG's financial programming for the relevant years?:* Yes, within Heading 3 Internal policies.
- *To which broader objective defined in the DG's financial programming does the objective of the proposed operation correspond?:* Energy policy, increase of energy supply security and improved energy efficiency.

10. Administrative expenditure (part A of the budget)

This section of the financial statement must be sent to DGs IX and XIX; DG IX will then forward it to DG XIX with its opinion.

10.1 Will the proposed operation involve an increase in the number of Commission staff? If so, how many? No.

10.2 Indicate the amount of administrative expenditure involved in the proposed operation. Explain the method of calculation:

The amount of administrative expenditure necessary to carry out the programme will be in the order of 150,000 ecus for 1995. It is broken down as follows:

- MEETING COST:	
Advisory committee of Member State representatives; three meetings per year with two delegates per Member State (one meeting of one day, two meetings of two days), based on the average of 658 ECU (only travel cost) - budget heading A251	48,000
Expert committee of Member State representatives; two meetings per year with two delegates for one or several days, based on the average of 658 ECU (only travel cost) - budget heading A250	32,000
- MISSIONS OF COMMISSION STAFF:	70,000
TOTAL PER YEAR:	ECU 150,000

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