COMMISSION OF THE EUROPEAN COMMUNITIES

COM(82) 357 final

Brussels, 14 September 1982

Proposal for a

Council Decision (EEC)

on the payment of financial incentives in support of categories of investment in the rational use of energy

(submitted to the Council by the Commission)

COM(82) 357final

COMMISSION OF THE EUROPEAN COMMUNITIES

CORRIGENDUM

COM(82) 357 final/2

Brussels, 11 October 1982

Proposal for a

Council Decision (EEC)

on the payment of financial incentives in support of categories of investment in the rational use of energy

(submitted to the Council by the Commission)

COM(82) 357final/2

Proposal for a Council Regulation on the payment of financial incentives in support of categories of investment in the rational use of energy

CORRIGENDUM

1. Delete the expression "using innovatory high-yield technology" on the following pages:

Introduction - page 1, para. 2(b)

Explanatory memorandum - page 2, para. 7(b)

Proposal for a Regulation - page 2, 6th Whereas, second line

- 2. Delete the phrase "using several novel technologies" in the introduction, page 3, last line of the first paragraph.
- 3. Explanatory memorandum page 5, delete the last five lines of paragraph 11; "Such incentive measures ... and for protecting the environment".
- 4. Explanatory memorandum paragraph No 7 is part of paragraph 6. Paragraphs 8-17 are renumbered 7-16.
- 5. Proposal for a Regulation page 5, Article 5, add new sub-paragraph C
 "With existing national aids, subject to such conditions as may be determined by the Commission."

INTRODUCTION

1. The following draft regulation follows the communication on investment in the rational use of energy (COM(82)24 final).

The Commission had declared in that communication that in its opinion certain types of investment merited additional financial support in order to help in overcoming obstacles, especially those of a financial character, which continue to hinder their achievement. These types of investment, four in number, are as follows:

- a) Investment in the production of heat for district heating systems from industrial waste heat, and from solid fuel and waste materials;
- b) Investment in the conversion of industrial oil-fired installations to coal, using innovatory high-yield technology;
- c) Investment in operation related to the preparation of coal for users other than power stations and coke ovens;
- d) Investment in the generation of energy from urban, agricultural and industrial waste and from agricultural by-products.
- 2. Those investments are of considerable public importance since they are an indispensable element in the rapid and lasting modification of energy demand (savings, substitution for imported oil) which is one of the essential objectives of the Community Energy Strategy (COM(81)540 of 1.10.81). Apart from their positive effect in lessening the energy constraints on the European economy, these investments are likely to have appreciable effects on the level of activity and the competitiveness of our industries, and hence on the level of employment.

This point deserves to be emphasised at the present time of recession and rising unemployment, and at a time when the European Council has insisted on the need to mobilise the financial instruments available to the Community.

- 3. The attached proposal is a concrete response to these anxieties; it is designed both to act as an incentive and to provide an example of how Community policy may be developed.
- 4. This proposal is an example in that the four types of investment described are well defined, constitute actual cases for the application of orientations and objectives set out in the Community energy strategy, are likely to stimulate far-reaching changes in the behaviour of industrial, public and domestic consumers and in many cases will lead to the best use of the existing - and potential - energy resources of the Community.

This applies to district heating systems, which - using solid fuels and waste materials, and recovering waste heat - will be capable of supplying a much larger part of demand for low-temperature heat, which accounts for about 40% of gross energy consumption in the Community.

This is also true of the investments required to achieve greater use of coal - rapidly and in more diversified form - both through the conversion of oil-fired plant and through investment in coal preparation.

Lastly, it also holds good for the investments which will be necessary for the full exploitation of the very large potential (50 to 60 t.o.e. or 7 to 9% of the Community's present energy consumption) for the more efficient use of urban and industrial and above all agricultural wastes and by-products.

5. This measure has an incentive effect by reason of its limitation in time (from 1.1.83 to 31.12.87); it will involve payment, after examination of the technical and financial characteristics of each project presented to the European Investment Bank or to the Commission, of an interest rebate three percentage points over ten years for district heating projects or five years for the other investment categories.

The order of magnitude of the financial support to be granted is estimated at some 10% of the total investment costs for projects with a long lead time (heating systems) and about 5% of the total investment costs in the case of projects with a shorter payback period (e.g. the conversion of a boiler using several novel technologies).

Since it will in appropriate cases supplement other national or Community incentives, the incentive measure so provided should lead to modification of the payback period (or the internal rate of return) of the investments involved in such a way as to initiate or accelerate the decision to invest.

This mechanism amounts in certain cases to the grant of a financial benefit linked either to loans from the European Investment Bank or to loans granted in accordance with Council decisions empowering the Commission to raise loans in respect of the New Community Instrument or to loans granted under the terms of Article 54 of the ECSC Treaty. The measure will not, by its very nature, necessitate the creation of additional administrative infrastructure. All that is needed to get it moving is to clarify the conditions which will govern the requisite co-operation between the Commission and the European Investment Bank. In due course decisions on appropriate procedures relating to this point will be taken, with particular attention to ensure that the auditing powers of the Court of Auditors are fully maintained.

7. Finally, the Commission has undertaken an estimate of the annual budgetary implications of the implementation of the regulation proposed to the Council. Based on known projects of each type of investment and on hypotheses relating to the proportion of these projects eligible for Community loans, the average duration of these loans, in non-differentiated appropriations, and the discount rate, this calculation gives an estimated need for 12 million ECU for the first year and 35 million ECU for each subsequent year to 1987. On the basis of the hypotheses employed this would allow of interest rebate facilities for loans totalling about 1200 million ECU over the entire period.

EXPLANATORY MEMORANDUM

- 1. On 5 February 1982, the Commission sent the Council a communication and a draft recommendation on investment in the rational use of energy and on the measures which should be adopted at national and Community level to encourage this type of investment.
- 2. This document demonstrates the importance of achieving a sufficiently large volume of investment in the rational use of energy; it does so by stressing the permanent reduction of the Community's dependence on oil and the beneficial effect on employment which would result. The document also examines the policies and measures already in force in Member States, as well as the difficulties and obstacles which have been encountered.
- 3. On 16 March 1982, the Council held a preliminary discussion on the Commission's document. It recognised the study as useful and stressed the need to encourage efforts towards achieving the Community's energy objectives.
- 4. The European Parliament and the Economic and Social Committee have been consulted. The resolutions adopted by them echo the Council's conclusions in recognising the importance that must now be attached to increasing the volume and rate of investment in the rational use of energy. They stress that a more prominent role should be accorded to the financial instruments available to the Community, and emphasizes the need for regular monitoring of progress made. This priority was reaffirmed by the Energy Council on 13 July 1982 which formally adopted the draft recommendation proposed by the Commission.*
- 5. The very broad measure of agreement on the analysis presented by the Commission arises from the fact that this line of argument fits into the development of an energy strategy for the Community; it is also a contribution to the search for practical solutions called for by the European Council on several occasions in considering the low rate of productive investment and the importance, in this context, of strengthening the Community's lending instruments, especially with respect to energy investment.

^{* ?} Provisionally.

- 6. To this end, the Commission identified particular types of investment which merit additional support from the Community because, even though they are of great importance for the energy policy, they continue to encounter obstacles particularly of a financial and economic character, although in many Member States they already receive support, either by means of direct subsidies or of interest-subsidised loans to their implementation (uncertainty about the future trend of energy prices, long payback periods, cost of equipment, high and unstable interest rates.
- 7. This extra support must take the form of granting financial incentives which would while respecting the rules of competition supplement the existing incentive measures, so as to initiate or speed up the decision to invest.
- 8. The following types of investment are involved, although the order given does not imply any kind of priority:
 - a) investment in heat generation for district-heating systems using industrial waste heat, solid fuels and waste material;
 - b) investment in the conversion of industrial fuel-oil-fired plant to coal using innovatory high-yield technology;
 - c) investment in operations related to the preparation of coal for users other than power stations and coking plants;
 - d) investment in the generation of energy from urban, agricultural and industrial waste and from agricultural by-products.
- 9. The production of heat for district heating networks is in many cases a very good way of overcoming the situation whereby demand for low-temperature heat which is used for space heating and for domestic and industrial hot water and currently represents some 40% of the Community's gross energy consumption continues to be met, as at present, by excessive use of oil and natural gas.

This method of using district heating networks to replace large numbers of small individual heating appliances saves energy by achieving better performance values, the recovery of hitherto wasted heat and the combined production of heat and electricity.

This technique should also make it possible to increase considerably the potential for substituting other energy sources for imported oil (solid fuels and heat from waste).

The structure of supply and demand for energy in each Member State and the fact that substantial amounts of investment are involved explains the fact that district heating networks have not been developed to the same level throughout the Community.

Some countries like Denmark and the Federal Republic of Germany have already granted considerable public aid (Denmark: 250 million Dkr in 1977-80; FRG: 730 million DM in 1977-81) and made substantial investments and are hoping to continue to do so. Other countries like France and Italy have made less progress although they have already made significant achievements and a number of projects have already been investigated. Other countries are only just beginning to consider the possibilities of district heating networks.

In all, there exist today in most Member States a number of projects which have satisfactory characteristics from both the technical and economic viewpoints, but in respect of which the decision to invest is hindered by a complex of factors, mainly financial or administrative in nature. It must be stressed that the development of district heating networks involves very heavy investments with very long payback periods: the lead time of a complete project covers on average a period of 15-20 years; moreover, such projects generally lose money in the first 5-6 years. In consequence, their economic justification is closely linked with the amount of the interest charges and with the trend in energy prices; the latter variable seems to be decisive. This whole series of constraints and uncertainties has hitherto been responsible for delaying the building of heating networks, especially by local authorities.

This being so, it is the Commission's view that the granting of financial incentives appropriate to the level of investment, and coupled with Community loans would be capable of initiating or accelerating investment decisions which would contribute directly to the successful implementation of the Community's energy strategy.

- and providing the facilities required for preparing imported coal is not primarily designed to save energy, as are the investments in the previous category, but rather to encourage increased and more immediate use of solid fuels, particularly coal, and their more widespread substitution for imported oil.
- 11. There is considerable potential here since industrial consumption of fuel oil for energy purposes is of the order of 60 million toe of oil per year.

 Although the major energy-consuming industries (above all the cement industry) have already converted boilers, there is still a need for conversion in undertakings with a considerable energy consumption where fuel costs represent only a small proportion of total production costs.

But, whereas the body of economic variables which determine whether a conversion project in these industries is economically justified or not generally lead to payback periods of the order of four to six years, analysis of the decision criteria applied by the firms to investments which are not directly productive - conversion to coal-firing in these industries show that the payback period demanded is in most instances two years or less. So. bearing in mind the relatively small share of energy costs in the production costs of these industries, the price differential between coal and fuel oil (currently estimated at some 35% to the industrial user) is still not sufficient to decide the issue in favour of coal in the light of: the high cost of the investment and of the additional equipment for coal-firing; the additional costs and complications introduced into the manufacturing process; the constraints and costs associated with the site areas required for the combustion equipment and for storing the coal; the cost of meeting ___environmental standards; and, finally, the lack of experience with and confidence in coal which characterizes many industrialists.

True, in the long term this differential should become accentuated, so gradually providing the requisite financial justification for these investments. Meanwhile, however, the sensitivity of Community industry to the pressures likely to appear on the oil market will have grown continually. This is why the Community has made a speeding-up of the growth in coal sales a basic

element of its energy strategy. In the light of this, the Commission believes that the investment operations involved in conversion to coal-firing must be accelerated by grants of financial support. Such incentive measures must however be restricted to conversion projects making use of novel, high-yield technologies, such as fluidized-bed combustion, which has the further advantage of reducing the environmental problems. What is more, such a choice fits in well with the Community guidelines for promoting technology and for protecting the environment.

12. However, wider use of coal cannot be achieved purely by promoting demand.

Measures must be taken at the same time to improve the supply of the fuel, and particularly its preparation.

This implies a need to establish coal preparation plants together with handling and storage capacity tailored to the specific requirements of coal users. Plants of this type, which can handle all or some of the operations required to prepare coal (sorting, crushing, washing, etc.), should be set up at the main coal-importing ports (Rotterdam, Antwerp, Dunkirk, Le Havre, Fos-Marseille, Wilhelmshaven and, in the next few years, probably Copenhagen, Trieste and Savona), and at the dispersal ports supplied with coal in medium-sized ships (like Bordeaux, Nantes, Amsterdam, Bremen, Rome, Porto Marghera, Naples, etc.).

13. The main problem with this investment is basically that the coal distributor must immediately install a substantial volume of treatment capacity to be able to meet — on good retail price terms — a demand which will increase only gradually. The investor therefore has to take a definite risk and, for several years at least, will have to accept a low load factor, which will result in higher unit costs, and in turn will considerably lengthen the payback period. This explains the delay in carrying out such investments, which are nonetheless a prerequisite condition to the consumption of coal. The grant of Community support would — by increasing to an appreciable extent the rate of return from these investments, which do not at this moment benefit from any specific national incentive measures — encourage the installation of infrastructures the place of which in the Community's coal strategy has repeatedly been stressed by the Commission.

- 14. The recovery of energy from urban, industrial and agricultural waste and from agricultural by-products is an extremely large field where little has yet been done. Nevertheless, it represents a very substantial source of energy, estimated at some 50 or 60 million toe a year, or between 7 and % of the Community's actual energy consumption. This potential lies very largely in the optimum use of agricultural wastes and by-products. Hence the Commission intends at least in the initial stages of the system described, to devote particular attention to projects in this field; the Commission also hopes that such projects could be, if necessary, grouped together and presented by suitable organisations.
- 15. Essentially this involves the production of energy from Community resources which, to a large extent, have hitherto either been wasted (urban and agricultural waste; process heat which is discharged into the atmosphere) or ignored (biogas, bioalcohol, etc.). It should also be emphasized that in many cases, apart from the actual energy aspect, there would be obvious advantages for the environment and a yield of by-products which could be used as fertilizers or feedingstuffs, thus in the long term helping somewhat to restore the balance in the Community's agricultural trade with some of its partners.
- 16. Many technological systems have already been put into service or are already past the demonstration stage for deriving energy from household waste (simple or combined incineration, waste-derived fuels, recovering gas from landfill tips, methane fermentation), from sewage sludge, the fermentation anaerobic, methanic or alcoholic of agricultural by-products, or using industrial wastes to produce energy either by combustion or fermentation.
- 17. These systems are in operation here and there throughout the Community and in many cases were promoted by local communities, farms and co-operatives, or by industrial undertakings. They nevertheless fall a long way short of exploiting the considerable potential which has been shown to exist in the

Community. This is due to a multiplicity of reasons which highlight the extreme diversity of the range of investment possibilities in this field; certain of these should be underlined. Primarily, there is the fact that those faced with taking the decision to invest are often also faced with major financing difficulties in respect of a number of projects of equal priority status (local authorities) and/or are little interested in an investment which has no link or direct value to their "main activities" (industries, enterprises or agricultural co-operatives). In general terms, the Commission stresses the fact that these are relatively new activities, which may grow considerably in the long term, but which require in the present stage financial incentives to encourage users to accept the risks or to overcome the obstacles which still exist. The multiplier effects accompanying any new economic activity in this sector are considerable and provide an additional justification for the Community's efforts here.

The Commission therefore considers it both useful and timely that the Comminity should grant support for selected projects in the four categories of investment described above. on the payment of financial incentives in support of categories of investment in the rational use of energy.

The Council of the European Communities

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

Having regard to the proposal from the Commission;

Having regard to the opinion of the European Parliament; (1)

Having regard to the opinion of the Economic and Social Committee (2);

Whereas pursuant to Article 2 of the Treaty, the Community has as its task to promote throughout the Community a harmonious development of economic activities, a continuous and balanced expansion and an increase in stability;

Whereas there exists in this context a critical need for the Community to diversify its energy supplies and to switch away from oil to alternative forms of energy;

Whereas it is also important in this context that the structure of energy demand should be modified so as to reduce substantially and permanently the constraint which excessive energy dependence still imposes on the economic activity of the Community;

Whereas at the same time the structure of demand for energy cannot be sufficiently modified without a volume of investment markedly higher than that which has so far been made in the Community as a whole;

⁽¹⁾

⁽²⁾

Whereas in the present situation many producers and consumers hesitate before making the requisite investments, particularly as a result of the uncertainty about the prospects of the economy or in respect of energy;

Whereas despite the national measures already introduced to encourage investment, the volume of investment in energy — and especially in the rational use of energy(0.4% of CDP in 1980) — has remained insufficient;

Whereas the Community should therefore provide an additional active aid to investment in the rational use of energy;

Whereas certain categories of investment in this field are especially important in ensuring the achievement of the energy policy objectives, particularly the diversification of sources of energy and the modifying of the pattern of demand, and in consequence are of great public interest;

Whereas this applies to investments designed to exploit industrial waste heat, or recover heat from waste or to encourage the use of solid fuel in the production of heat for district heating systems;

Whereas this also applies to investment enabling firms to replace more rapidly oil-fired plant by coal-fired plant using novel high-yield techniques;

Whereas this applies equally to investments in the preparation of coal to render this fuel economically attractive for use in heat-generating plant the location, size, and fuel requirements of which vary widely;

Whereas this applies equally to investments designed to produce energy from urban, agricultural and industrial waste, and also from agricultural by-products;

Whereas the commitment of these categories of investment encounters economic and financial obstacles arising from uncertainty about the future course of energy prices, the long payback period generally required for investment, the cost of equipment, high and unstable interest rates, and budgetary constraints which restrict the activity of certain organizations, especially local authorities;

Whereas there is a need to bring into play the Community's lending instruments which are suitable for accelerating the implementation of investment projects falling under one of the four headings set out above, these investment projects having been hindered hitherto by the obstacles and uncertainties referred to above;

Whereas the granting of a specific incentive funded from the budget of the European Communities — and associated with, and where appropriate additional to other national or Community incentives — would be capable of initiating or accelerating the decisions to invest;

Whereas, in this context, it is appropriate that investors granted loans under the terms of Article 54 of the ECSC Treaty should also be eligible for such incentives;

Whereas such investments are likely to have significant positive effects on economic and industrial activity, competitiveness and hence on employment;

Whereas the granting of these aids by the Community must not affect the conditions of competition in a manner incompatible with the relevant principles set out in the Treaty;

Whereas the Treaty does not provide the specific powers necessary for these purposes;

Has adopted this Regulation:

Article 1

Investment which falls within one of the four categories set out below and which is in receipt either of loans granted by the European Investment Bank from its own resources, or of loans granted under the Council decisions empowering the Commission to contract loans under the New Community Instrument, or of loans granted under Article 54 of the ECSC Treaty may receive a specific incentive granted in the form of an interest rebate:

- Category 1: investment in heat generation for district-heating systems using industrial waste heat, solid fuels and waste material;
- Category 2: investment in the conversion of industrial fuel-oil-fired plant to coal using innovatory high-yield technology;
- Category 3: investment in operations related to the preparation of coal for users other than power stations and coking plants;
- Category 4: investment in the generation of energy from urban, agricultural and industrial waste and from agricultural by-products.

Article 2

Subject to approval of the granting of a subsidized loan, the Commission shall decide on the eligibility of projects for an interest rebate in accordance with the following guidelines:

- the investment must be consistent with the energy objectives of the Community;
- the investment must make use in an efficient manner of adequately proven technology;
- the investment must be consistent with the provisions of the Treaty and of derived legislation, particularly in the area of competition, in addition to Community regulations and policies which apply to the cases in question.

Article 3

- 1. Subject to the provisions of Article 5 paragraph 2 the rate and duration of the interest rebate referred to in paragraph 1 shall be as follows:
 - 3% per annum for a period of 10 years in the case of category 1;
 - 3% per annum for a period of 5 years for categories 2, 3 and 4.

2. When the interest rebate applies to ECSC loans, the sum is paid directly to the investor. In all other cases, it will be paid to the ETB.

Article 4

The procedure governing applications for subsidised loans, their payment and their administration will be in accordance with the rules and procedures governing each of the individual lending instruments listed in Article 1.

Article 5

The financial incentives provided for in Article 1 of this regulation may be additional to -

- a) The subsidy of certain loans granted in the context of the European Monetary System and to aids paid from the Regional Development Fund.
- b) Subsidies which may in certain cases be granted under Article 54 of the ECSC Treaty. In this case the rate and duration of the rebate granted in respect of this Regulation shall be limited to 2% per year over 5 years.

Article 6

Sums payable in respect of incentives granted under this Regulation shall be paid by the Commission from the appropriations provided for this purpose in the General Budget of the European Communities.

Article 7

- 1) Provisions for the implementation of this Regulation shall be adopted by the Commission.
- 2) Except in respect of rebates on ECSC loans, the application of this Regulation shall be covered by a Cooperation Agreement between the Commission and the European Investment Bank.

Article 8

This Regulation shall come into force on 1 January 1983; it shall apply until 31 December 1987.

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