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COMMUNICATION FROM THE COMMISSION TO THE COUNCIL

Evaluation of the Community demonstration programmes in the energy sector

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Communication from the Commission to the Council : Evaluation of Community demonstration programmes in the energy sector

I. Introduction

- 1. On 23 February 1982 the Council of the European Communities decided that the Commission, with the Member States, would assess the role of demonstration projects on energy-saving and alternative energy sources in the energy and research policies of the Community and the Member States.
- 2. Furthermore, according to Regulations (EEC) Nº 1302/78 and Nº 1303/78, the Commission is required to report periodically on the application of these Regulations to the European Parliament and to the Council. A preliminary report was submitted in July 1981. (1)
- 3. A technical evaluation of the Community demonstration programmes was undertaken by the Services of the Commission, with the help of independant experts. A more succint evaluation of national programmes was carried out by the Services of the Commission, based on the results of a survey in the Member States. From this work an evaluation report of Community demonstration programmes (2) was produced. This present document sets out the main technical conclusions of this report, considers a number of related questions and suggests directions future Community action could take. For further details reference should be made to the evaluation report; crossreferences are given in the text.
- 4. Demonstration links the R&D stage, sometimes tested on pilot plant, and the later investment stage. It differs from the R&D and pilot stages in the industrial scale of the projects, the requirement of having prospects of economic viability, and from the normal investment stage in that the inherent risks are still considered by the entrepreneurs to be too high.

(1) COM (81) 397 final

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5. Demonstration is an essential stage at both national and Community level. The European Parliament, for it's part, has emphasised in several Resolutions (1) the need for demonstration projects to develop alternative sources of energy and energy saving measures. When the Community regulations concerning demonstration projects were adopted in 1978, only two Member States had introduced support measures for demonstration projects. Initially therefore the Community programme also served to ensure a minimum level of demonstration activity in all Member States.

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- 6. Since that time all Member States, often prompted by the Community programme, have set up national programmes to support demonstration projects. The Community programme - chiefly a stimulantuntil now - will in future, as in the case of the Community R&D programme, be required to coordinate and supplement national programmes as well.
- 7. The demonstration programme is not only the logical extension of Community R&D activities: because it provides the opportunity for exploiting projects from national R&D programmes at Community level it also opens up a European scale market for them.

II. The Community demonstration programme

8. This programme covers energy-saving and alternative sources of energy:

Regulation nº 1303/78 on the granting of financial support for demonstration projects in the field of energy-saving lists the following possible fields of application :

(1)-Resolution of 17.11.77 on the 2 draft Commission Regulations. -Resolution of 18.02.80 on the energy objectives for 1990.

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- buildings
- supply and use of process heat and of electricity in industry
- energy industry

- transport.

- 9. Regulation nº 1302/78 on the granting of financial support for projects to exploit alternative energy sources lists the following areas :
 - exploitation of geothermal fields
 - exploitation of solar energy
 - liquefaction and gasification of solid fuels
 - exploitation of wave, tidal and wind energy.

Several considerations, including budgetory factors, have lead the Commission to limit action to the first three sectors for the time being.

10.Commitment appropriations	in the Community	Budget for	demonstration projects
are as follows :			

	Energy - saving	Alternative energy sources
1978	4	11
1979	16	16
1980	25	47
1981	24	59
1982	20	_21
	89 MECU	154 MECU

Total: 243 MECU

11.At the outset, the Council fixed expenditure ceilings of 150 million ECU for the demonstration programme. In view of the large number of high-quality projects put forward the Commission decided in October 1980 to ask for the original amount to be doubled. On 23 February 1982 the Council asked the Commission to make this evaluation as a basis for the requisite decisions and proposed, in order to give viability and credibility to Community actior, to increase the ceiling by 55 million ECU. The break-down between sectors would be as follows :

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	Energy saving	Geothermal energy	Solar energy	Liquefaction and gasifica- tion of coal
Original total funding 150 million ECU	55	22,5	22,5	50
Increase: 55 million ECU	26	10	0	19
New total: 205 million ECU	81	32 , 5	22,5	69

- 12. In the first three years of operation of the programmes, the Commission issued two invitations to submit projects in the solid fuel liquefaction/ gasification sector and three invitations in each of the other sectors. No fewer than 1432 projects were submitted to the Commission in response to these eleven invitations, corresponding to a total investment of 4143 million ECU.
- 13. The Commission was assisted in selecting projects by four advisory committees whose members should be well-acquainted with national programmes because of their positions in national administrations. In some cases, the members of these advisory committees also sat on Community R&D programme committees; they gave the Commission valuable advice in selecting projects for support. Generally speaking, co-ordination between the R&D and demonstration programmes has become increasingly satisfactory.
- 14. To date the Commission has selected a total of 331 projects for financial support. Subsequently, 49 of these projects have been withdrawn by their proposers, chiefly because of difficulties in financing the part of the investment not covered by Community financial support. In many cases too, the proposers realized only later that the Community system, unlike national systems, imposes repayment requirements: if the project is commercially successful part of the Community support has to be refunded.
- 15. The selected projects represent total investment of nearly 900 million ECU. If it is assumed that investment projects take an average of three years, the volume of new investments stimulated by the Community demonstration programme is 300 MECU/year.

About one quarter of this investment is provided by Community financial support. The following table gives the main figures for the various sectors :

	Energy saving	Geothermal energy	Solar energy	Liquefaction and gasifica- tion of coal	TOTAL
Proposals submit- ted	991	119	287	35	1432
Total investment of proposals sub- mitted (MECU)	2363	544	236	1000	4143
Projects selected	186	48	84	13	331
Projects withdrawn by the proposer	30	5	11	1 .	47
Contracts signed	89	28	40	12	169
Total investment of selected pro- jects (MECU)	273,1	301	78,217	226,261+	878 , 6
Average investment per project	1,47	6,27	0,93	17,405	2,65
Financial support granted (MECU)	80,773	28,243	22,915	74,983	206,9
Projects withdrawn (MECU)	10,390	4,885	2,584	4,34	22,2

+ First contractual phases only.

16. The financial limit (150 MECU) set for the programme by the Council in 1979, smaller than the budgetary allocation, has caused major difficulties in programme me management. Since November 1981 the programme has effectively been hampered as a result of the dispute between the budgetary authorities. In particular, four Commission decisions on new demonstration projects are held up until the intention expressed by the Council of 23 February 1982 to increase the financial limit by 55 MECU (to 205 MECU) is implemented. As soon as an appropriate decision is taken this will align the total funding with the budget allocation at the end of 1981. Budget credits for 1982 exceed the 205 MECU ceiling, but the Council, whilst awaiting the examination of the technical evaluation report, has not taken a corresponding decision.

17. The Commission has dealt in detail with the question of diffusion of results in it's preliminary report of July 1981 (1). Since then, the Commission has published quarterly reviews ("newsletters") reporting on the different programmes. The Commission has also started to establish complete and regular updated computerised documentation on the state of the programme and the results obtained.

III. Evaluation of the results of the Community programme

18. All the projects for which contracts have been signed have been assessed, however only about 60 projects are sufficiently advanced for the results to be clear and for initial conclusions to be drawn. (2)

	Energy saving	Geothermal energy	Solar energy	Coal liquerac- tion and ga- sification
Number of projects assessed	91	22	70	4
Number of projects suf- ficiently advanced for initial assessment of the results	23	22	16	4
Of which projects com- pleted	12	l	3	1

19. This technical evaluation was performed by Commission departments, including the Joint Research Centre, with the help of high-level independent experts. The experts were able to visit most of the projects which had reached an advanced stage.

Since many of the projects are still under way a technical and economic evaluation which is both comprehensive and final is not possible at present. The results already obtained nevertheless enable some valid comments to be made. The main points from the technical evaluation are summarised in the following paragraphs whilst the Commission's political conclusions, taking this evaluation fully into account, are set out in Chapter V.

(1) COM(81) 397 final.

(2) Situation end April 1982.

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- A. Energy-saving (1)
 - 20. By 1990 the Community (the Tén) could be saving 130-150 million toe/ year, or 12-14% of gross energy consumption at that time. The Community projects so far approved are expected to yield energy savings of about 700 000 toe/year. These savings are expected to have a multiplier effect, depending upon the nature of the projects and the efforts made to disseminate the results. These projects feature energy savings which vary according to their technological sector. In the industrial sector, for example, one project alone will save a steelworks 100 000 toe/year; the nine projects in the residential building sector will achieve no more than 60 toe/year. This is due to the inherent differences between the sectors and the nature of the projects.
 - 21. The average levels of investment and of support granted are 1 450 000 ECU and 430 000 ECU respectively, in other words an average Community contribution of roughly 30%. This support has frequently been a determining factor in the achievement of the projects, the rate of support is thus considered to be satisfactory.
 - 22. Although all of the projects are technologically innovative, their degree of economic viability can vary considerably. Out of 23 projects whose results are currently available for assessment, 13 are to be considered completely successful and commercially exploitable. One project has already started to pay back the Community's financial contribution. Results from the other 10 are useful but fall short of the original aims.
 - 23. Of the projects adopted, 14 are based on techniques which had previously received financial support under a national or Community R&D programme.
 - 24. The assessment report suggests that, whilst keeping to the initially very wide range of possible applications of the programme, further action should place more stress on certain technological subsectors with particular promise. In it's own conclusions in Chapter V, the Commission draws heavily on the considerations put forward in the technical assessment report. (see point 54)

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(1) Evaluation report: Pages 1 - 51

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B. Geothermal Energy (1)

25. By 1990 geothermal energy could provide 4-5 million toe of the Community's energy needs, and, on some estimates, around 20 million toe at the turn of the century.

The Community's action has prompted many practical plans to exploit geothermal energy sources, previously used only for space heating in the Paris region and electricity generation in central Italy. It has consequently been possible to run demonstration projects in several French and Italian regions, in Greece, the Federal Republic of Germany, the United Kingdom, Denmark, the Netherlands and Belgium.

- 26. Geothermal energy projects carry a significant "mining risk" in that the resources which can actually be exploited often fall short of the potential estimated before drilling. Exploitation of discoveries is sometimes further hindered by technical problems and by a lack of suitable equipment. This situation is only likely to improve as more experience accrues from proliferation of actions throughout Community regions with a variety of geological conditions.
- 27. The preliminary results obtained from the 22 most advanced demonstration projects are encouraging and more than half of them are commercially exploitable.
- 28. Low-temperature sources of geothermal energy (40-150°) are the most plentiful. Their exploitation is crucial to the development of geothermal energy in the Community. The assessment suggests that as in the past, the development of low-temperature sources be also emphasized in the future, though without neglecting the particularly promising high-temperature sources. A special effort should be made to promote projects to tap geothermal energy for agriculture and industry.

C. Solar energy (2)

29. Although the total solar energy incident upon the Community greatly exceeds our requirements, its low intensity and variable nature mean that we cannot expect more than 40 to 70 million toe from it by the year 2000. This is nevertheless a significant contribution. In certain developing countries the potential contribution of solar energy towards the year 2000 is considerable.

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⁽¹⁾ Evaluation report: Pages 67-73

⁽²⁾ Evaluation report: Pages 52-66

- 30. The Community programme has dealt with the three main aspects of solar energy use i.e. conversion into heat, photovoltaic conversion and biomass. Solar heating and biomass are technologically more advanced and . so more projects were selected in these areas than in photovoltaic conversion. However, only low-temperature applications currently reach the break-even point. Amongst these are solar-heated swimming pools; in this field, the assessment report concludes that demonstration has reached a satisfactory level now.
- 31. It can be seen from the distribution of <u>thermal projects</u> over the Member States that in northern and central Europe solar energy serves chiefly for hot water production and space heating; in the southerly regions agricultural and industrial applications predominate. The **evalutation** suggests that, in future, the programme should concentrate more on seasonal storage, solar-heated greenhouses and drying processes.
- 32. The use of <u>photovoltaic</u> cells is confined at present to a number of specific applications in telecommunications, telemetry, alarm systems, and electricity supply for remote sites. The assessment suggests that if this sector is to be developed there must be further support at the R&D level; new invitation for the submission of proposals at the demonstration level is not envisaged in the short term. In the medium term photovoltaic arrays yielding a few KW should enable applications at remote locations and in developing countries to proliferate at an acceptable cost. It is with this type of application that the current demonstration programme is concerned.
- 33. <u>Biomass</u> is no doubt one form of solar energy likely to make a significant medium-term contribution to the Community's energy balance. Projects have been supported under both the regulation relating to energy-saving and that concerning alternative energy sources.

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34. The evaluation of the solar projects was carried out from the viewpoint of their current application within the Community. The use of the same techniques, often in more favourable conditions in developing countries could greatly influence the level of economic viability.

D. <u>Solid-fuel liquefaction and gasification</u> (1)

- 35. Although limited in scope by the funds available, the programme covers most of the major technological fields. The projects are helping to solve the, often severe, technical problems raised by the building and operation of large installations. Only large-scale installations are effectively able to provide, in the event of major increase in oil prices, the possibility of reducing the degree of Community dependance on hydrocarbon imports. Effort applied to the liquifaction and gasification of solid fuels is given special importance in the light of this dependance
- 36. While a number of projects are close to economic viability, others are more of a industrial pilot plant nature. In particular, the economic viability of the underground gasification and of liquefaction projects still largely depends on technical advances requiring large-scale installations and on relative oil-prices.
- 37. All projects for the gasification and liquefaction of solid fuels are large-scale and need long lead times and significant financial resources. Under the present programme Community participation has generally been limited to the opening phases of projects. Considerable public funds will still be needed to enable them to reach the operational phase.

IV. The Member States'demonstration programmes (2)

38. In response to the Council's request for an evaluation of the importance of demonstration projects in the energy and research policies of the Member States the Commission undertook a survey by means of a questionnaire.

The results of the survey are set out in the technical assessment report and the Member States'replies in a separate Working Document. In view of the information supplied by the Member States and of time limitations, the assessment was necessarily more succinct than for the Community programmes.

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(1) Evaluation report: Pages 74-84

⁽²⁾ Evaluation report: Pages 88-92

- 39. All Member States except Italy provide financial support for demonstration projects in the energy sector. In Italy, a law adopted in May 1982 should enable demonstration programmes to begin shortly. Generally speaking, demonstration programmes were not adopted until towards the end of the 1970s. Earlier programmes concentrated on activities closer to the research stage. Support for demonstration projects in the field of energy saving developed in almost all the countries concurrently with the Community programme and in some cases under its impetus. Many of the Member States began their alternative-energy programmes after the Community scheme had got under way.
- 40. The scope of support measures varies considerably. In energy-saving the chief sectors are buildings and industry and in alternative energy are solar heating, wind, biomass, geothermal and coal gasification.
- 41. From the information supplied to the Commission it emerges that the Member States have granted a total of approximately 815 million ECU(2) in financial support since the inception of their demonstration programmes. A breakdown of national expenditure in 1982 by Member State and by sector is given in Table F of the assessment report. The following table summarises, for the various sectors, the total support granted to date in the framework of national actions and compares this with the financial envelope of the Community programmes.

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	National actions	Financial envelope of Community pro- grammes
Energy saving	208	81
Alternative sources	162	124
of - solar	128	22,5
- geothermal	22	32,5
- wind	12	0
Gasification/liquifaction of solid fuels (1)	445	69
Totals	815 (2)	205

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(1) Of which the largest part in Germany (F.R.)

(2) Including, for certain Member States, research support.

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- 42. The financial contribution depends on the nature of the project; it also varies considerably between Member States. In general it is not less than 25% of the total investment but may in some cases be as much as 100 %.
- 43. The cost of feasibility studies is paid under most of the Member States' programmes (unlike the Community programme). The costs of data-logging and performance measurement are generally paid in full. Repayment does not seem to play a major role in national aid systems.
- 44. In the energy-saving sector the size of the investments being supported and - consequently - the amount of support is on average much lower than under the Community programme: the exceptions are the Greek programme, which also includes support for research, and the Federal German programme which provides extensive support, at high percentage rates, for district heating. The Commission has not been able, from the information supplied by the Member States, to analyse the exact reasons for this difference between Community and National programmes.
- 45. Although a large number of demonstration projects have been completed in several Member States, the results do not seem to have been, in general, systematically disseminated or made available. For demonstration programmes to have the desired multiplier effect a great deal remains to be done to disseminate results.
- 46. No Member State has yet carried out detailed, methodical evaluation the results of demonstration programmes. France has conducted an assessment but it was confined to the energy-saving programme in the tertiary sector. Denmark reported that it had made general evaluation of its programme but supplied no specific information on this subject. The United Kingdom stated that an evaluation would be completed in 1983. The Federal Republic of Germany has not yet assessed the energy-saving programme as a whole; it is to assess the solar and coal-gasification sectors in a few years. All the other countries believe that it would be premature to evaluate their programmes at the present stage.

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47. National programmes are often of recent inception and are still evolving. New sectors are being phased in. All Member States believe that demonstration projects have an important role both in their energy and research policies and in their economic policies generally.

V. Continuation of the Community demonstration programme

- 48. The period since 1978, when the Regulations setting up the Community demonstration programmes were adopted, has seen the Iranian revolution, the war between Iran and Iraq and the oil- price explosion; it has also been marked by continuing economic crisis. In these circumstances the Community's energy supplies are still vulnerable and, as was emphasised by the Council of 16 March 1982, the Community must not relax its endeavours to make more efficient use of energy and to diversify the supply.
- 49. In its Communication to the Council on investment in the rational use of energy (1) the Commission emphasized the need for the Community and the Member States to promote necessary structural changes, particularly so that demand may be effectively controlled. Such changes require a high level of investment in the rational use of energy. To promote demonstration an intermediate stage between research and investment is one way of fostering that investment.
- 50. The essential role of demonstration was emphasised by the Commission when it made its proposals covering Community demonstration programmes in the fields of energy saving and of alternative energy sources. Furthermore , it is encouraging to note that the importance of demonstration led Member States to follow suit on a national basis so that all Member States now have their own demonstration programmes. However, there is as yet little coherence between these national programmes and the sectoral coverage is patchy. Hardly any in-depth **evaluation of** these activities has yet been carried out.

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- 51. The evaluation of the Community demonstration programme reveals that:
 - the choice of projects is pertinent,
 - the technological coverage is sufficiently wide,
 - an encouraging proportion of the projects are likely to achieve or even surpass their objectives, whilst others will achieve useful results,
 - many demonstration projects have been supported at the R&D stage in Community or national programmes
 - priority sectors are progressively becoming clear,
 - in promoting innovation throughout the Community, the programme has a stimulating effect;
 - a good start has been made to a Community-wide diffusion of the results obtained,
 - the programme promotes a growing level of cooperation between undertakings in different Member States.
- 52. National programmes naturally reflect national priorities. On the other hand, the Community demonstration programmes have the role of stimulating and completing national actions in line with the energy strategy of the Community. Projects supported on a Community basis must be capable of encouraging other similar installations in a significant number of Member States and/ or be such as to profit from a market of European dimensions. Priority will be given to projects stemming from Community and national R&D programmes.

To argue against Community demonstration programmes on the grounds that recent actions at National level have the same objectives is to reject one of the fundamental aspects of the Community: that of common and joint actions undertaken in many sections of community life.

53. Coordination of national actions and Community programmes becomes from now on an important task, in the execution of which the Advisory Committees could render the Commission effective support. A periodic examination of national actions could be carried out in parallel with the yearly examination of the Member States'energy policies. To this end it would be necessary to set up regular and methodical communication to the Commission of demonstration actions undertaken at national level. It will also be necessary to obtain the reaction of interested parties to the actions of the Community.

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54. Priorities for the future have emerged with greater clarity as a result of the assessment of Community demonstration programmes.

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In the <u>energy-saving</u> programme the original fairly wide spectrum of possible applications should remain, but in future more room should be found for industry, for tertiary-sector buildings (1), and for energy production from waste.

The <u>industrial sector</u> is one of considerable potential, particularly the large energy consuming industries such as iron and steel, (clearly shown in the results of an "energy audit" recently undertaken by consultants on the Commission's behalf), cement, non-ferrous metals, glass, heavy chemicals and paper.

In the <u>buildings sector</u>, demonstration activity should be directed towards projects by large investors, societies and cooperatives, who already manage large public and private building complexes, thus profiting from their potential as experience multipliers.

The use of <u>combustible waste for energy purposes</u> also permits the utilisation of the considerable energy resources of low-calorific-value solid fuels and of various waste materials so far unexploited.

The energy saving potential in <u>transport</u> is very high. The different transport sectors use some 24.5% of the Community's total energy and 44% of total oil supplies. So far, very few project proposals have been received for transport and all of those retained relate to road transport. As the European Parliament emphasized in its resolution (2) of October 1981, it is necessary to work out a strategy at Community level to achieve this energy saving potential. In this context the Commission will more closely define the contribution which demonstration projects can make to this important sector.

Public, administrative and commercial buildings
Report W. Albers, October 1981.

In the <u>district heating sector</u>, where proven techniques are mostly used, the Commission will concentrate it's efforts on new techniques, particular in those regions where heating networks are not well developed.

On the other hand, in sectors such as <u>agriculture and some other industrial</u> <u>areas</u>, the Commission takes the view that, in the light of experience, it is not appropriate to elevate the level of demonstration actions.

- 55. In the <u>alternative-energy</u> programme, work in the <u>geothermal</u> sector should continue substantially as at present. Proper development of geothermal energy in the Community is heavily dependent on support from public funds owing to the major financial risk when drilling in new regions. Even if the drilling and operating techniques are not always innovative, their application in varied conditions provides valuable experience for similar circumstances.
- 56. The <u>solar</u> energy programme should be kept open for all the sectors now covered, i.e. thermal use, photovoltaic conversion and biomass. But future effort should be directed at those fields, notably heating and biomass, which have the best prospects of economic application in the short and medium term. There are no plans at present for a further call for tenders on photovoltaics. As to thermal uses, the Commission takes the view expressed in the assessment, that demonstration action concerning swimming pool heating is at a satisfactory level, and does not intend to give further financial support to this type of project.
- 57. The Commission attaches special importance to projects for the <u>liquifaction</u> and <u>gasification of solid fuels</u>. The processes used are directed towards the replacement of gaseous and liquid hydrocarburs by solid fuels, even in situation where the direct use of solid fuels is difficult if not impossible or where the use of electricity may not be the best solution. The exact moment when these procedures could become commercially viable varies from case to case - in some cases this has already happened - and depends on the development of other energy prices. Furthermore, it is probable that

certain processes will be applied, at least in the first instance, in third countries rather than within the Community, due to inherent site advantages and proximity to cheaper sources of raw materials. The large industrialised countries, outside the Community, have a diminishing interest in these processes. In this situation, the Commission considers that the Community must itself ensure the development and demonstration of this technology, which it will certainly have need of in it's vulnerable energy situation. Because of their size and long lead times, projects in this sector are particularly costly, there is thus very real advantage in a joint development and demonstration activity at Community level. For those reasons, the Commission intends to persue this action diligently, together with improvements designed to take account of the special features of this sector. Further to those features already outlined, it should be noted (see Para. 36) that the associated projects are either of the demonstrationor of the industrial pilot plant type. In these circumstances, the Commission considers it necessary to devote a specific Regulation to this sector.

- 58. Still within the alternative energy programme and in response to the request of the European Parliament and of several Member States the Commission intends to extend action in the field of alternative energy sources to include harnessing energy from the <u>wind</u> and the <u>sea</u>.
- 59. It also intends to include in this programme the harnessing of <u>low-head</u> <u>waterpower sources</u>. The emergence of new techniques gives rise to expectations that sites hitherto unused could be economically exploited.
- 60. One class of projects which could not be included in present programmes on the scale required by their importance relate to <u>oil substitution</u>. In the context of it's efforts to reinforce the penetration of coal in the energy market, the Commission will propose the inclusion in the demonstration programme of projects concerning <u>new technologies for solid</u> fuel combustion and the disposal of spoils and ash (1).

(1) COM (82) final: The rôle of coal in the Community energy strategy.

The Commission wishes to extend it's action to the fields of the <u>substitution of oil by electricity</u> produced from non-hydrocarbon sources, and the <u>transport</u>, <u>distribution and storage of heat</u>. Thus extended, the demonstration programme would acquire a new dimension in full accord with the Community energy strategy.

61. An important **task** of the demonstration programme is a systematic dissemination of results. The Commission will pursue the action, referred to in point 17, with increased effort, as soon as a significant quantity of results is available. Periodic seminars are proposed, as normally held in connection with the research programme, at which different contractors working in any one sector can meet. In suitable cases, the R&D and demonstration seminars could be combined. Also foreseen is the organisation of conferences on a European scale, at which experiences of both national and Community programmes may be exchanged.

The most interesting final project reports will be assembled and published. sectoral reports, treating the results of projects in any one sector, will be prepared and widely circulated. Site visits may also be arranged.

The Commission will, in the course of dessemination of the results of the Community programme, include those results of national actions which the Member States agree should be circulated in this way.

VI . Conclusions

62. The Commission is pleased that the Council decided that an evaluation of the Community demonstration programmes should be undertaken now, and that it should be combined with an assessment of actions at national level. This work has proved fruitful and should be repeated from time to time. Future evaluation should go into greater detail. To this end, the Commission will establish an appropriate methodology and will make greater use of outside consultants.

- 63. The evaluation has demonstrated to the Commission the need for improvements to the existing programmes in the following areas :
 - (1) Closer co-ordination between national and Community actions;
 - (2) Some adjustment of the fields covered by the Community programme: activity should be reduced or stopped in certain sectors and maintained or increased in others: certain new sectors should be included;
 - (3) Community action should allow the support of projects inside as well as outside Community territory if so justified by the nature of the projects;
 - (4) Some aspects of programme management should be modified, such as :
 clearer distinction between demonstration projects and pilot-projects;
 extension of financial support to feasability studies prior to the
 - simplification as far as possible of the reimbursement clauses in the event of commercial success,
 - more effective and systematic diffusion of results, by means of publications, seminars and conferences.

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64. The Commission proposes that the Community demonstration programme should be pursued on the basis outlined above and that appropriate funding should be made available to do so. As to the necessary financing, the Commission has already made it's views known for the short term though the first draft of the 1983 budget. At the time of the establishment of this first draft, the Commission had most of the elements of the project assessment available; subsequent information has not given the Commission any reason to change it's position. However, supplementary information could be made available to the budgetary authority in the course of the budget approval procedure.

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realisation of projects;

- 65. In the spirit of these considerations, the Commission will shortly submit to the Council the following proposed Regulations:
 - a proposed Council Regulation concerning the granting of financial support to demonstration projects in the fields of the exploitation of alternative energy sources, of energy saving and of hydrocarbon substitution modifying Council Regulations (EEC) N°s 1302/78 and 1303/78;
 - a proposed Council Regulation concerning the granting of financial support to industrial pilot projects and demonstration projects in the field of liquifaction and gasification of solid fuels, modifying Council Regulation (EEC) N° 1302/78.
- 65. The Commission considers that the continuation of the demonstration programme along the lines indicated above will not only contribute to the reinforcement of the Community energy strategy but will also assist industry to obtain more advantage from a market of European dimensions.