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TECHNICAL SYMPOSIUM ON LATIN AMERICA
AND THE CURRENT ENERGY PROBLEMS

Santiago, Chile, 23-27 September 1974

REPORT

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CONTENTS

	<u>Paragraphs</u>	<u>Page</u>
INTRODUCTION	1- 8	1
Part I TECHNICAL SYMPOSIUM ON LATIN AMERICA AND THE CURRENT ENERGY PROBLEMS	9-15	4
A. Attendance and organization of work	9-14	4
Opening and closing meetings	9-11	4
Membership and attendance	12-14	4
B. Programme	15	5
Part II ACCOUNT OF PROCEEDINGS	16-55	6
1. Statement by the Executive Secretary	16-20	6
2. The international economic situation and the current energy problems	21 -33	7
3. The repercussions of the energy problems on Latin America and possible international co-operation measures	34-55	12
Part III IDEAS AND CONCEPTS ASSEMBLED BY THE SECRETARIAT ON THE BASIS OF THE DISCUSSIONS AND DOCUMENTATION OF THE SYMPOSIUM	-	20
1. The nature of the current energy problem	-	20
2. The repercussions of the problem on the Latin American countries ..	-	21
3. The various measures which the Latin American oil-deficit countries could take to meet the higher import costs	-	22
Annex I PROVISIONAL PROGRAMME		27
Annex II LIST OF PARTICIPANTS		33
Annex III LIST OF DOCUMENTS		37



INTRODUCTION

1. The Committee of the Whole of the Economic Commission for Latin America (ECLA) held its eighth extraordinary session at United Nations Headquarters, New York, on 24 and 25 January 1974.^{1/} On that occasion the Executive Secretary informed the delegations - first of all in document ^{2/} and subsequently verbally - that early in the year he had sent a letter to member Governments suggesting that the Secretariat should be given guidelines at that session in respect of technical co-operation that ECLA could provide on energy matters, especially in view of the serious problems facing Latin America and the international community in that area.

2. He also indicated that the general concern about the energy situation had already been reflected at various levels in the United Nations and that the Secretary-General had himself set up an internal co-ordination team to study the necessary co-operation measures. He laid stress on the experience that ECLA had acquired through its analyses of natural resources, particularly energy resources, mentioning in particular its recently-published study on petroleum.^{3/}

3. After a lengthy discussion which showed the interest of the member Governments on the subject and provided valuable guidelines for the secretariat, the Committee set up a Working Group. The results of this Group's labours took the form of some conclusions which were duly approved by the Committee in connexion with the agenda item entitled "Technical co-operation of ECLA in the field of energy":

^{1/} See the report on this session (E/5495/Add.1 and E/CN.12/AC.66/5/Rev.1).

^{2/} "Meeting on the energy crisis and its repercussions on the economies of the Latin American countries", E/CN.12/AC.66/4.

^{3/} See La industria del petróleo en América Latina: su evolución reciente y perspectivas (E/CN.12/940), United Nations publication, Sales No: S.73.II.G.2.

- "1. There was full recognition of the concern of Governments regarding the energy crisis and its impact on the economies of the countries of the region.
 - "2. It was recognized that the experience of the ECLA secretariat in the field of energy resources could be particularly useful. Accordingly, the desire was expressed that the secretariat should intensify its efforts in this field with a view to submitting to member Governments, as soon as possible, its observations and conclusions concerning the impact of the energy crisis on the economies of the region.
 - "3. The Office of the Executive Secretary was invited to co-operate closely with the Latin American Energy Organization (OLADE) with a view to their assisting each other in the discharge of their respective tasks."
4. Following the approval of those conclusions by the Committee of the Whole, the Chairman requested, in the light of what had been said during the debates, that the report of the meeting should state that the Executive Secretary was fully empowered to carry out the technical analyses in whatever manner and with whatever advisory services might prove to be necessary.
5. In compliance with this mandate, the secretariat immediately undertook a general study on Latin America and the current energy problems, especially as regards petroleum supplies, and prepared other documents which examine such specific aspects as the electricity industry; the prospects and possibilities of coal; transport; fertilizers, and new investment requirements.
6. At the same time, in consultation with other international inter-American agencies interested in the subject, namely the International Monetary Fund (IMF), the International Bank for Reconstruction and Development (IBRD), the United Nations Food and Agriculture Organization (FAO), the Organization of American States (OAS) and the Inter-American Development Bank (IDB), the secretariat requested the technical collaboration of their experts so as to be able to cover other topics connected with the energy problem, such as international monetary agreements, the effects of the crisis on the

/agricultural sector

agricultural sector of the Latin American economies, the medium and long-term prospects of energy supply, future trends of trade in primary products, repercussions observed in the fiscal sector, etc.

7. With the majority of these studies completed or well advanced, the secretariat of the Commission considered it timely and necessary to conduct an exchange of experience with the national experts working directly in this area in their own countries. It was felt that a contribution could thus be made at the institutional level to the endeavours of Governments to clarify the region's short and medium-term energy problems, by considering them also in the context of the international co-operation required to tackle them on the various fronts.

8. It was with this aim that the Executive Secretary of ECLA, with the support and collaboration of the Latin American Institute for Economic and Social Planning, decided to convene the present Symposium.

Part I

TECHNICAL SYMPOSIUM ON LATIN AMERICA AND THE
CURRENT ENERGY PROBLEMS

A. Attendance and organization of work

Opening and closing meetings

9. The Technical Symposium on Latin America and the Current Energy Problems, organized jointly by ECLA and ILPES, took place at ECLA/ILPES headquarters in Santiago, Chile, from 23-27 September 1974.
10. At the opening meeting, the Executive Secretary delivered a statement on the nature of the Symposium and declared it open.
11. At the closing meeting, held on 27 September, the provisional report which had been prepared was presented to the representatives attending the Symposium, who made various observations on it. The secretariat was authorized to put it into its final form and to prepare a document - for possible publication in book form - assembling all the material used as a basis for the proceedings.

Membership and attendance

12. The Symposium was attended on a personal basis by technical experts from various national agencies in the field of energy, invited by the secretariat for this consultative meeting. Representatives of various international and inter-American agencies also attended. A complete list of the participants in the discussions is given in Annex II.
13. In addition to the Executive Secretary, Mr. Enrique V. Iglesias, and the Director of the Executive Office, Mr. Jorge Viteri de la Huerta, the technical secretariat of the Symposium was headed by Mr. Eduardo García, Director of the Natural Resources and Environment Division, assisted by, in particular, Mr. Joseph Mullen and Messrs. Jorge Trénova and John Philip Thomas, with the collaboration of Messrs. Carlos Plaza and Jaime Baraqui. In other aspects, connected with the trade problems arising from the international energy crisis, the technical secretariat was assisted by Mr. Norberto González and Mr. Nicasio Perdomo.

14. Annex III gives a list of the documents presented by the secretariat for the consideration of the Symposium and those prepared by consultants and specially invited participants.

B. Programme

15. At the opening meeting, the Executive Secretary consulted the participants regarding the provisional programme (ST/CEPAL/Conf.50/L.1/Rev.1) placed before them, and in the absence of any objections to its contents it was considered that it would serve as a useful guide for the work of the meeting. In view of its length, it is reproduced separately as Annex I of this report.

Part II

ACCOUNT OF PROCEEDINGS.

1. Statement by the Executive Secretary 4/

16. Opening the proceedings, the Executive Secretary of ECLA referred to the importance of the Symposium and the significance of the fact that a group of high-level experts and consultants had agreed to take part on a personal basis in the discussions on a topic of vital importance to Latin America in the current international situation.

17. He emphasized the very special attention which ECLA had given for over twenty years to energy and natural resources. In that respect, he made special mention of the studies and research through which ECLA had collaborated with member Governments, with agencies such as the Latin American State Petroleum Enterprises Mutual Aid Association (ARPEL), the Regional Electricity Integration Committee (CIER) and the Latin American Conference on Rural Electrification (CLER) - whose creation and development it had followed very closely - and with the regional and subregional integration agencies: the Latin American Free Trade Association (LAFTA), the Permanent Secretariat of the General Treaty on Central American Economic Integration (SIECA), and the Board of the Cartagena Agreement.

18. He briefly reviewed the background and objectives of the Symposium, the results of which could be extremely useful at the present time for the work being carried out by national and international agencies in the energy field and for the recently-created Latin American Energy Organization (OLADE), to which ECLA wished to give the greatest possible technical co-operation.

4/ The statement by the Executive Secretary (in extenso), together with the material which served as a basis for the discussion at the Symposium, will appear in the form of a book, which is in course of preparation and will be published shortly by the Fondo de Cultura Económica.

19. As regards the nature of the discussions, he pointed out that the subject permitted of various approaches, but that it was not for ECLA to concern itself in the present Symposium with the political angle, which had been discussed at length in international forums, and especially in the United Nations General Assembly. Nevertheless, in the light of the central topics of the Symposium, and in the context of a free and open dialogue between experts who could speak with complete freedom, consideration should also be given to those aspects of the matter which had had so significantly affected relations between the developed world and the developing countries.

20. The approach to the discussion should basically be on two levels: the economic and the technical, and the secretariat wished to concentrate on both of those in its consultations with the assembled experts. To that end, the discussion would be divided into two stages. The first stage would examine the current energy problems and the present international economic situation, and its links with the technical aspects of the energy problem in Latin America, and the second stage would analyse possibilities of co-operation at the international level.

2. The international economic situation and the current energy problems

21. The debate on this item began with the examination of the international economic situation, as an introduction to the subsequent discussion of the current energy problems.

22. The first document before the meeting was entitled "Recycling the oil export surpluses" and was presented by its author.^{5/} This paper examines the nature of the international financial problem confronting the world community in general and the Latin American countries in particular, and explains the operation of the new Special Oil Facility set up by the International Monetary Fund (IMF) as a contribution to the international adjustment process.

^{5/} Walter Robichek, International Monetary Fund (see Information document No 11).

23. A summary of a paper entitled "Primary commodities: the outlook for Latin America" was then presented by its author.^{6/} The document explores the recent record of basic commodity prices (including crude oil prices) and their short-term prospects and examines the various determining factors involved and the conditions needed for the developing countries to be able to pursue policies aimed at protecting or stabilizing the prices of their export products.

24. Next, a document entitled "Latin America and the oil deficit: the long-term balance-of-payments adjustment process" was presented by one of its authors.^{7/} This paper explores the immediate balance-of-payments prospects of the Latin American economies and their chances of securing greater financial assistance to meet the deterioration of their balance of payments caused by the higher cost of their petroleum imports. It concludes with some observations on the long-term adjustment processes that the increased price of internationally traded crude oil will imply for Latin American countries with oil deficits.

25. Finally, a study prepared by the Organization of American States (OAS) entitled "Latin America and commodity prices in 1973 and 1974" was presented to the Symposium.^{8/} This document indicates that among the main reasons for the rise in prices of most basic commodities during the period were the more rapid economic expansion of the developed countries and the instability of the international monetary situation. The study surveys the immediate prospects for the prices of a variety of basic raw materials and concludes that, in general, these prospects are not favourable for a variety of Latin America's basic commodity exports. It also mentions how difficult it would be for exporters of other products to take the kind of initiatives taken by petroleum exporters and examines alternative stabilization policies

^{6/} Shamsheer Singh, International Bank for Reconstruction and Development (IBRD) (see Information document N^o 12).

^{7/} Leonardo da Silva, Inter-American Development Bank (IDB). The other author is Joaquín González, also of IDB (see Information document N^o 8).

^{8/} The document was presented by the economist Nicolás Rivera, of the Department of Economic and Social Affairs of OAS (see Information document N^o 7).

that the developing countries could pursue. In conclusion, the study analyses the importance of the role of the Organization of Petroleum Exporting Countries (OPEC) in explaining the recent trend as well as in conditioning future changes in the price of internationally traded crude oil.

26. In the general discussion which followed the above presentations, detailed consideration was given to three main topics: the problem of recycling the surplus funds of the oil-exporting countries; the importance of both export promotion and import substitution policies in the efforts of the oil-deficit countries to cope with the effects of the increased world oil prices; and the need for such countries to increase supplies of indigenous crude oil and oil substitutes and to improve the general efficiency of energy utilization in their economies.

27. With regard to the problem of recycling, several basic observations were made:

(a) The origin of the problem was largely the fact that the increased price of world oil had generated export receipts in a small number of largely Middle Eastern oil-exporting countries which were far in excess of what their economies could usefully absorb;

(b) While opinions varied on the scale of the recycling problem, there was general agreement that if current oil prices continued, that scale would continue to be phenomenal in relation to the usual international financial flows;

(c) To date, the international financial mechanisms created for dealing with the recycling problem were inadequate in the context of the magnitudes involved. Failure to forge an adequate set of recycling mechanisms represented a severe threat to world employment and output, especially when longer time horizons were considered;

(d) The IMF was not in a position to cope singlehandedly with the recycling problem. A number of mechanisms would therefore have to be established to channel the surplus funds of the oil-exporting countries to both the developed and the developing world;

/(e) Recycling,

(e) Recycling, which was necessary to deal with the short-term problem, also had its own difficulties, for even if funds could be recycled to the oil-deficit countries of Latin America, for example, the need to repay short and medium-term external debts would make the external indebtedness position even more critical for some of them than it was now;

(f) The degree to which Latin American oil-deficit countries needed recycled funds varied widely, but several of them obviously needed such funds urgently on concessionary terms.

28. The discussion of the need for both export promotion and import substitution brought out several key ideas:

(a) There was now a greater need for Latin American basic commodity exporters to explore ways in which they could accelerate their export earnings. Two lines of action were mentioned in the Symposium: (i) the establishment of producer's associations, and (ii) international commodity agreements. Also mentioned was the possibility of restructuring the financial relations between the producer countries and international companies to the benefit of the former in the case of some basic commodities;

(b) Agriculture represented a potentially large source of import-substitution products in Latin America in the near future. The prospects for import substitution of manufactures did not, however, generally seem as bright now as in the past; nonetheless, the possibilities for such import substitution within the expanded context of regional integration schemes warranted serious consideration;

(c) A downward movement in the price of many of Latin America's basic commodity exports was quite possible in the next few years; if that happened it would intensify not only the need for export promotion and import substitution, but also the need for increased access to international credits on concessionary terms.

29. Several basic ideas were put forward on the subject of action falling under the general heading of energy sector policy:

/(a) It

(a) It was underscored that the heart of the problem was the increased level of world oil prices in recent months;

(b) This being the case, there was a premium on projects and policies which would increase the supply of indigenous oil or oil substitutes and which would promote the efficiency of energy use within the oil-deficit countries of the region;

(c) With regard to projects for increasing the supply of indigenous oil and/or oil substitutes, it was noted that the benefits of those projects lay in the relatively distant future, while their realization would involve greater foreign exchange requirements and therefore further increase the need for financial assistance to developing oil-deficit countries.

30. Continuing the discussion of energy and the present international situation, the participants took up the document entitled "The 'energy crisis' and agriculture: a background assessment", prepared by Mr. R.J. Perkins of FAO.^{9/} This paper deals with the background to the world energy crisis and some of its main macroeconomic repercussions. It also reviews the impact of the crisis on world agriculture, placing special emphasis on the resulting changes in the competition between agricultural raw materials and their substitutes.

31. Stress was laid in the discussions on specific aspects calling for emphasis. It was pointed out, above all, that the lack of any significant margin of "non-essential" consumption of oil in many Latin American oil-deficit countries meant that reductions in domestic oil consumption would quickly jeopardize both production and employment. That being so, the critical problem facing those countries was the need for more assistance to offset their balance-of-payments deficit. Various speakers made reference to the clear manner in which Mr. Robichek's paper explained the mechanism of the IMF's Special Oil Facility.

^{9/} In the author's absence, this study was presented by Mr. Luis López Cordovez, Chief, Joint ECLA/FAO Agriculture Division. (See Information document No 5.)

32. It was noted that a careful study needed to be made of the recent profit margins of the major petroleum companies, while it was also observed that the very economic structure of many developing countries put them at a disadvantage vis-à-vis the developed countries when it came to trying to gain benefits from economic opportunities in the world markets.

33. At this point in the debate, the Executive Secretary of ECLA said that he considered it desirable to emphasize certain of the basic ideas covered in the course of the Symposium. The current situation of the petroleum market should be seen in the broader context of the extensive changes taking place in international trade and financial relations, and not only in terms of the adjustments in oil prices compared with the markedly low levels of the previous years. Those changes introduced a major element of uncertainty which, starting with the inflation generated in the major centres and the collapse of the rules of the game laid down at Bretton Woods, led to great instability in prices and world trade flows, with effects that distorted the balances of payments of all the countries. In that context, the recycling of the financial surpluses of the petroleum-exporting countries acquired importance. The solution of the latter problem would call for different responses from different institutional levels such as the United Nations financing agencies and the banks of the inter-American system and the regional banks. The recycling of capital was already an urgent problem and it would become even more urgent as time went by. Major economic adjustments would have to be made not only in the countries of Latin America and other regions, but also in the actual operation of these international agencies.

3. The repercussions of the energy problems on Latin America and possible international co-operation measures

34. The technical secretariat opened the discussion on this item, described the background that had led to the convening of the Symposium, and gave a brief account of the contents of the documents it had presented for discussion. (See Titles in annex III.)

35. The participants had before them the study entitled "Energy supply/demand outlook 1980-1985",^{10/} which outlines the conditions leading to the sharp increases in international oil prices and reviews the factors that will most affect world energy supply and demand in the next decade.

36. The report entitled "Energy resources development opportunities in developing countries, with special reference to Latin America"^{11/} was then presented. The author underlined the need to improve national energy planning and the potential usefulness of studying non-conventional energy sources with a view to promoting economic development. He drew attention to the following basic points: (a) an accelerated programme to prospect for and increase oil supplies in developing oil-deficit countries was essential; (b) many countries could obtain economic benefits from the use of non-conventional sources of energy ; and (c) it was most important now to promote the efficient utilization of the various sources of energy all over the world.

37. The Symposium then turned its attention to the document entitled "The prospects of Latin America's petroleum in the energy crisis",^{12/} which attaches particular importance among the several aspects covered, to the study of the economically exploitable oil fields in Latin America and the tremendous potential of the region based on general geological considerations and on analogies with other regions of the world which are much better known in this respect.

^{10/} Presented by the author, Mr. Efraim Friedmann, of the International Bank for Reconstruction and Development (IBRD) (see Information document No 6).

^{11/} Prepared by S. Rao, Chief, Energy Section, Resources and Transport Division, United Nations (see Information document No 9).

^{12/} Prepared and presented by Bernardo F. Grossling, of the United States Geological Survey (see Information document No 13).

38. The discussion revolved essentially around two points: (a) the effect of the increase in petroleum prices on the economies of the various countries, and (b) the various measures affecting the energy sector already taken or under consideration in order to cope with the higher cost of petroleum.

39. The discussion of the effects of the increase in the world price for crude oil covered a number of macroeconomic aspects, such as the level of domestic prices, production and employment, and the balance of payments. It was emphasized by several speakers that the threats arising from higher oil prices compounded those of the same nature that had been evident in the world economy for other reasons prior to the increased price of world oil. The participants from petroleum-exporting countries analysed the significance of central government plans for the most efficient use of the increasing volume of foreign exchange generated by oil exports.

40. There was an extensive and wide-ranging exchange of views on the measures and plans concerning the energy sector that had been taken or mooted in response to the higher international prices of petroleum. In the discussion of measures already adopted, emphasis was placed on those designed to reduce the growth rate of gasoline consumption and to ensure that petroleum was used more efficiently, especially in the field of transport. Although some measures had made it possible to save foreign exchange, the possibility of cutting consumption was obviously limited if slumps in production and employment were to be avoided.

41. Several speakers noted that the economic cost of not consuming oil and energy in general was given by the value of production foregone by so doing and that, in this context, strong efforts should be made to avoid cutbacks in production, since their value was generally much higher than the value of the energy thus saved.

42. With regard to longer-term plans for tackling the increase in world petroleum prices, the participants displayed particular interest in the following aspects: (a) projects for increasing the supply of domestically-produced petroleum and substitutes (hydroelectricity,

/nuclear fuels,

nuclear fuels, natural gas and coal, for example); (b) international energy projects, especially the development of hydroelectricity reserves on a multinational basis and the international interconnexion of electricity networks; (c) internal interconnexion of electricity networks; (d) devotion of greater attention to the planning of the energy sector. Experts from petroleum-exporting countries stressed the importance that their governments attached to the conservation of hydrocarbon resources owing to their being non-renewable, and their use in other important areas such as petrochemicals and in particular in the production of fertilizers.

43. The Director of the Natural Resources Division of ECLA, who was also the Technical Secretary of the Symposium, proposed the following subjects as being of likely interest for additional consideration, since they were included in the group of ideas which regional and world public opinion had been forming in this respect.

- (a) the prospects for world crude oil prices in the 1970s;
- (b) recent trends in the price and delivery terms of petroleum drilling and extraction equipment and electricity generating plant (including nuclear power stations);
- (c) the establishment of a fund to finance oil exploration activities by Latin American oil-deficit countries;
- (d) the possibility of crude oil being sold at preferential prices to the Latin American economies most severely affected by the new world oil prices;
- (e) the possibility - in view of the higher world oil prices and the successful results already achieved by national companies in many Latin American countries - of greater State action in the oil industry of those countries of the region where such activity had previously been mainly in the hands of the private sector;
- (f) the prospects for oil ventures abroad by Latin American oil-deficit countries;
- (g) the possibility of relatively small State-owned oil companies in Latin America combining their oil imports with those of larger State-owned companies in order to secure more favourable prices for imported crude; and lastly,

/(h) the

(h) the prospects of establishing an international oil agreement.

44. The Symposium discussed these subjects in general and then made specific comments on the following four aspects: (a) the price trend of crude in the 1970s and the forces which were likely to affect that trend; (b) the establishment of a special revolving fund in Latin America for financing increased oil exploration and measures to expand the supply of crude and oil substitutes in oil-deficit countries; (c) the bartering of oil for raw materials, manufactures and other goods between the oil-exporting and oil-deficit countries of the region; and (d) recent price trends and delivery terms of equipment for the electric power and oil industries.

45. A wide range of views was expressed regarding the trend which crude prices might be expected to follow in the rest of the current decade, and no consensus was reached in the discussion. It was repeatedly stated, however, that the following basic forces would determine those prices in the immediate future: (a) the degree of stability of the structural relationship between the international oil companies and the member countries of OPEC on whose territory those companies were operating; (b) the speed with which it was possible to supply substitutes for imported oil and the scale on which that could be done; (c) the rate at which oil utilization efficiency could be improved; (d) the consumers' reaction to the increases in the prices of refined oil products; and (e) the degree to which the OPEC countries succeeded in restricting the increase in the supply of crude oil in the world.

46. The idea of a special revolving fund to help finance measures to increase the supply of crude oil and petroleum substitutes in Latin American oil-deficit countries was warmly welcomed by the participants. It was noted, however, that every effort should be made to use existing sources of assistance to the full. Financing for preliminary prospecting work and for training technical and administrative personnel in the energy industries could be sought, for example, from IBRD and the regional banks. Generally speaking,

/however, the

however, the existing machinery was not capable of meeting the vast financial demands of a programme aimed at increasing the supply of national energy resources.

47. Several organizations were mentioned as being able to supply the necessary technical resources and serve as headquarters for the proposed fund: OLADE, the United Nations Development Programme (UNDP), ECLA, CIER and ARPEL. A number of potential sources of capital for the fund were also considered, including the OPEC countries (especially the Latin American petroleum-exporting countries), the financial organizations of the United Nations system, and the regional banks. It was emphasized that it was not only the Latin American oil-deficit countries which should actively promote the creation of the fund - ECLA also had a very clear role to play in that connexion.

48. The idea of the bartering of petroleum for other goods between Latin American oil-exporting and oil-deficit countries received strong support in the Symposium.

49. In the discussion of recent trends in the prices and delivery terms of equipment for the electricity and petroleum industries, it was noted that the prices of steel tubes, of various types of equipment for the petroleum industry, and of equipment for electric power stations (especially nuclear power stations) had recently risen steeply, while there had been a general lengthening of delivery times. It was also observed that the price of off-shore oil equipment had increased considerably in the recent past and that delivery times had also been extended significantly. The point was also made that it seemed very improbable that the manufacturing could at present supply nuclear installations of less than 600 MW.

50. In the debate on the above four topics, it was considered that ECLA should provide technical assistance on an increasing scale to OLADE, which in its turn should use the services of ARPEL and CIER in implementing its policies.

51. With respect to the general theme of international co-operation as it relates to Latin America and the "energy crisis", the basic problems identified were: (a) the immediate and continuing deficit

/on current

on current oil account caused by the increased cost of imported oil, and (b) the large increment in capital imports (on energy account) likely to be required by many Latin American oil-deficit countries in order to support new energy policies designed to meet higher world oil prices.

52. As regards the current account, the discussions emphasized the urgency of a solution to the recycling problem. It was noted that the treatment of this question had so far been inadequate, and as a result the world economy was in serious difficulties. The Special Oil Facility of the IMF provided only 3,400 million dollars of the estimated 70,000 million dollars required for recycling. Discussion centred on the mechanics of the IMF Special Oil Facility and on the role of barter arrangements in Latin America.

53. With respect to the capital account, it was observed that the Latin American oil-deficit countries might secure additional support from international financial institutions, but the scale of such support would probably be far below their requirements. Discussion focused on the need to create a revolving fund for financing energy projects in the region's oil-deficit countries. The role of bilateral and multilateral arrangements as a means of providing potential relief on capital account was also discussed.

54. Next, the Executive Secretary of ECLA made several points aimed at situating energy and its problems in the broader framework of the economic development of Latin America. The current difficulties in the energy field were a severe trial for many Latin American countries, but they were not without their potentially beneficial aspects in that they showed up a whole range of structural shortcomings, which gave food for thought and for new ideas. The problem which has appeared in the field of energy confirmed the need to promote new development models for Latin America and to speed up the rate of regional integration within that context.

/55. Several

55. Several experts noted that, in view of the rapid changes taking place on the world oil and energy markets, the ECLA studies submitted to the Symposium could not be considered as isolated or final efforts. On the contrary, ECLA efforts in the field of the economies of energy must be viewed as continuing ones over time and responsive to the changing reality of the marketplace.

Part III

IDEAS AND CONCEPTS ASSEMBLED BY THE SECRETARIAT ON THE BASIS
OF THE DISCUSSIONS AND DOCUMENTATION OF THE SYMPOSIUM

1. The nature of the current energy problem

1. The main problem concerning energy at present is the rapid increase in the prices of oil on the international market (following a steady decline over the period 1958-1970).
2. By its very nature, the energy "problem" has world-wide implications, since in one way or another it affects all countries and is the focal point of the attention of all governments. Various measures at both the national and the international level may therefore be envisaged.
3. Appraisal of the structure of the oil industry gives rise to several conjectures:
 - (a) In the opinion of the experts, the grounds for expecting a decline in the real price of oil on the international market in the next few years seem stronger than those pointing to an increase; but it is not possible to be dogmatic on this matter, and the final outcome will depend not only on the petroleum market, but also on what may happen on the whole international economic scene, particularly with respect to raw materials;
 - (b) Moreover, should a declining trend in the real world price of crude materialize, there is good reason to expect that such a decline will be relatively slow rather than abrupt;
 - (c) If the above forecasts are correct, the repercussions of the high world petroleum prices will be of a lasting nature and not merely transitory.

2. The repercussions of the problem on the Latin American countries

1. The new world petroleum prices pose serious problems for some Latin American oil-importing countries.

2. Within the unfavourable context of general inflation, these countries must cope with the following repercussions:

(a) The direct impact of the increase in petroleum prices on their balances of payments and on the domestic price of fuels, which will vary considerably from one country to the next;

(b) The serious indirect effect on other sectors of the economy;

(c) The combination of these repercussions with the process of general inflation deriving from other causes that had already made their presence felt before the rise in petroleum prices.

3. The 19 Latin American oil-deficit countries must review their development strategies because of the greater expenditure of foreign currency required to import crude oil at current prices, taking especially into account the impact on:

(a) Production and employment levels;

(b) All price levels of the economy as a whole, and in particular the prices of petroleum products;

(c) The cost of new investment required by future energy plans.

4. The five Latin American petroleum-exporting countries also need to review their development strategy so as to make efficient use of their increased income in connexion with the diversification and consolidation of their production structure.

5. From the Latin American standpoint, it would be desirable to promote a number of international financial arrangements in order to deal with recycling problems, both in the developed and the developing countries. These arrangements would need to offer channels for the recycling of the trade surpluses of the OPEC countries - estimated to total between 50,000 and 70,000 million dollars in 1974. It is essential that they should establish the machinery required to channel a major share of the funds which are likely to pour into the western industrialized countries towards the developing economies, and especially the petroleum-importing economies of Latin America.

6. If these arrangements are not concluded, this could sharpen the trend towards world economic depression with negative results for all countries. The progress made towards them so far is considered very inadequate.

3. The various measures which the Latin American oil-deficit countries could take to meet the higher import costs

1. The measures designed to reduce expenditure on oil imports may be applied on two broad fronts: (a) in the macroeconomic sphere, operating on the whole economy through monetary, fiscal and foreign trade instruments, and (b) in the energy sector, co-ordinated with the industrial, agricultural and transport sectors.

2. Owing to the particular characteristics of each of the Latin American economies, it is not possible to formulate a set of measures that will be equally applicable to all importing countries. However, some generalizations were made during the discussions.

3. The macroeconomic measures will have to play an active part in dealing with the problems of inflation and unemployment. The most important factors in their success will be the affectiveness of fiscal and monetary policies, the capacity to reduce imports and promote exports, and above all, the degree to which external financial assistance can be secured in order to tide the countries over the stage of adaptation to the new conditions.

4. In the energy sector, there is a wide variety of measures that can be taken. An emergency objective would be to reduce the volume of foreign exchange payments for petroleum imports. In many Latin American countries with petroleum deficits, however, there is very little that can be done to cut the consumption of crude oil without reducing employment and production.

5. Steps to cut down the demand for petroleum could include:

(a) an increase in taxes on gasoline and household fuels;

(b) promotion of the replacement of petroleum products by local fuels or sources of energy, if justifiable from the economic standpoint, and an increase in the domestic production of crude oil;

/(c) more

(c) more efficient use of fuels;

(d) development of hydroelectric and other resources for use on a multinational basis;

(e) interconnexion of electricity systems.

6. The following measures could be taken to improve the supply of imported petroleum:

(a) encouraging competition on the international petroleum market;

(b) taxing imported crude oil;

(c) centralizing the petroleum imports of oil-deficit countries in the hands of the State, where this is not already done;

(d) setting a lower unit book price for the crude oil used in the subsidiary refineries of the international companies, when this price is higher than that in force in relatively competitive areas of the international market;

(e) initiating or increasing supplies of crude from abroad by promoting activities of the State enterprises of oil-deficit countries in other countries;

(f) combining petroleum purchases by the State enterprise for a small country with those of the State enterprise of a large country, so as to obtain better terms for the former; and

(g) exploring the possibilities of a formal agreement between buyers and sellers of petroleum.

7. Activities aimed at reducing the demand for petroleum imports are those which offer the most rapid means of easing the balance of payments, since many of the measures aimed at increasing local supplies of petroleum and its substitutes are slow in bringing returns.

8. The main channels of action to alleviate the situation in the short term could be:

(a) increasing taxes on gasoline and fuels for domestic use;

(b) encouraging the optimum distribution of the demand for transport among the different means;

/(c) increasing

(c) increasing the production of local crude in those few oil-deficit countries in the region which currently have a capacity to produce it.

9. The longer the period considered, the more important it is for oil-importing countries to organize their action on the following three fronts:

(a) the execution of national and/or international projects which will enable them to find a substitute for some of the oil they consume;

(b) the expansion of local crude supplies;

(c) integrated planning of the various components of the energy sector.

10. Projects designed to replace oil consumption are not only slow in bringing returns but also generally entail large-scale investment, thus aggravating the balance of payments problem. This makes it even more imperative to obtain external aid, as well as to set up a special fund for the development of Latin America's energy resources.

11. The oil-deficit countries of the region will require additional financing not only on current account, for oil imports, but also on capital account for the development of projects and the purchase of the necessary equipment.

ANNEXES

Annex I

PROVISIONAL PROGRAMME

23 September Morning and afternoon

1. Opening address by the Executive Secretary of ECLA, Mr. Enrique V. Iglesias.
2. The international economic situation and the current energy problems
 - (a) Statement by Mr. W. Robichek (IMF) on the recycling of the surpluses accruing from oil exports
 - (b) Statement by Mr. S. Singh (IBRD) on primary commodities and their prospects in Latin America
 - (c) Statement by Mr. Luis López Cordovez (FAO), presenting and commenting upon the study by Mr. R.J. Perkins (FAO) on the impact of energy problems on agriculture
 - (d) Statement by Mr. L.A. da Silva (IDB) on the joint study prepared with Mr. J. González (IDB) on the oil deficit and long-term adjustment of the balance-of-payments positions of the Latin American countries
 - (e) Statement by Mr. E. Friedmann (IBRD) on energy supply and demand prospects, 1980-1985
 - (f) Statement by Mr. N. Rivero (OAS) on Latin America and the prices of primary commodities in 1973 and 1974.

24 September Morning and afternoon

3. The current energy problems and their impact on Latin America

- (a) Introduction to the subject, by Mr. Eduardo García (ECLA)
- (b) Statement by Mr. S. Rao (United Nations) on the utilization of the energy resources of the developing countries in general and Latin America in particular
- (c) Statement by Mr. B. Grossling (United States Geological Department) on possible petroleum reserves in Latin America
- (d) Statements by ECLA consultants on the situation in specific countries or groups of countries of the region 1/

25 September Morning and afternoon

Comments and exchange of opinions on interesting points arising from the statements made during the meetings and from the working documents.2/

1/ A group of consultants have been invited by ECLA to describe the situation in their own country or, in the case of consultants of subregional agencies and associations, of a group of countries, along the lines indicated in appendix I. In order to cover the largest possible number of countries, the consultants have been requested to restrict their statements to a maximum of 30 minutes and to concentrate on the following main points; (a) immediate repercussions of current energy problems on the economy of the country (or of the subregion); (b) additional foreseeable repercussions on the economy before the end of the 1970's; (c) policy measures adopted in the light of the immediate repercussions of current energy problems; (d) measures to be taken in the event of future repercussions. The consultants have also been requested to submit a written summary of their statement to the Secretariat, expanding on any aspects that they consider necessary.

2/ Appendix II lists some suggested subjects for an exchange of views.

26 September Morning and afternoon

4. Latin America and current energy problems:
analysis of possibilities and opportunities
for international co-operation.^{3/}

27 September Afternoon

Summary of the activities of the Symposium

Closure

Appendix I

SUGGESTED ITEMS FOR THE STATEMENTS ON COUNTRIES OR GROUPS OF COUNTRIES BY THE CONSULTANTS INVITED BY ECLA

- A. Immediate repercussions of current energy problems on the
economy of countries:
 1. Price of imported crude petroleum and petroleum products (CIF)
 2. Price of petroleum products, natural gas, coal and electricity in the domestic economy
 3. Level of prices in general
 4. Production and employment
 5. Balance-of-payments
- B. Policy measures adopted in the light of the immediate
repercussions of current energy problems
 1. Macro-economic policies:
 - (a) Fiscal policy
 - (b) Monetary policy
 - (c) Foreign trade policy

^{3/} Appendix III contains a number of subjects that could be dealt with under this item.

2. Sectoral policies (apart from those of the energy sector: for example, transport)
3. Policies of the energy sector:
 - (a) Prices of petroleum products, natural gas, coal and electricity
 - (b) Petroleum imports
 - (c) Increased efficiency in the use of fuels (for example, reduction of wastage in electricity transmission lines and distribution networks)
 - (d) Measures to increase the supply of local fuels, other than the price mechanism (for example, production subsidies)

C. Foreseeable long-term repercussions of the continuation of current energy problems:

1. Consumption, production, investment and employment in the domestic economy
2. Balance of payments
3. Structure of energy consumption

D. Policy measures in respect of the foreseeable long-term repercussions of a continuation of current energy problems

1. Macro-economic policies
 - (a) Fiscal policy
 - (b) Monetary policy
 - (c) Foreign trade policy
2. Sectoral policies (apart from those of the energy sector: for example, transport)
3. Policies of the energy sector
 - (a) Prices of petroleum products, natural gas, coal and electricity
 - (b) Investment in energy industries
 - (c) Petroleum imports

- (d) Increased efficiency in the use of fuels and measures to increase production of domestic fuels, other than the price mechanism
- (e) Possible joint purchases of imported petroleum by two or more countries, and possible international agreements between producers and buyers.

Appendix II

TECHNICAL SUBJECTS SUGGESTED FOR AN EXCHANGE OF VIEWS

- A. Recent prices of crude petroleum and petroleum products on the international market
- B. Recent developments in the market for equipment for the petroleum industry and other energy industries (for example, prices, delivery dates, terms of payment)
- C. Examination of the new structure of deficits and surpluses of petroleum products in the countries, including the identification of mutually advantageous trade prospects
- D. Reduction of wastage in electricity transmission lines and distribution networks
- E. Experience and recent trends in the thermal output of public service electrical power stations
- F. Prospects for converting electrical power stations using fuel oil to coal or natural gas.

Appendix III

SUGGESTED SUBJECTS TO BE DEALT WITH UNDER THE ITEM "LATIN
AMERICA AND CURRENT ENERGY PROBLEM: ANALYSIS OF
POSSIBILITIES AND OPPORTUNITIES FOR
INTERNATIONAL COLLABORATION"

- A. Possibility of assistance from petroleum-exporting countries in respect of the balance-of-payments problems of Latin American countries with a shortage of this product
- B. Possibility of external assistance in respect of energy: capital account and current account
- C. Possibility of external assistance in respect of petroleum: capital account and current account
- D. Possibility of multinational energy projects
- E. Possibility of joint purchases of imported petroleum
- F. Prospects for international agreements between producers and buyers.

Annex II

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Annex III

LIST OF DOCUMENTS

Working documents

<u>Symbol</u>	<u>Title</u>
ST/CEPAL/Conf.50/L.1/Rev.1	Provisional Programme
ST/CEPAL/Conf.50/L.2	Latin America and the current energy problems
ST/CEPAL/Conf.50/L.3	The new oil prices and the Latin American electricity industry

Other technical documents #

ECLA	The increased investment requirements provoked by the rise in the price of petroleum. Information document No 1
ECLA	The new petroleum prices: their impact on transport in Latin America. Information document No 2
Ramón Suárez (consultant)	El carbón latinoamericano y sus perspectivas. Information document No 3 **
ECLA	Fertilizers: Prospects for supply and prices. Information document No 4
R.J. Perkins (FAO)	The "Energy Crisis" and agriculture: a background assessment. Information document No 5
Efrain Friedmann, Energy Advisor, World Bank	Energy supply/demand outlook 1980-1985 Information document No 6
Organization of American States (OAS)	Latin America and commodity prices in 1973 and 1974. Information document No 7

#/ These documents were presented provisionally as information documents, but most of them served as a basis for the discussions of the Symposium.

**/ At present available only in Spanish.

Symbol

Title

Joaquín González (IDB)

Latin America and the oil deficit:
the long-term balance of payments
adjustment process. Information
document N° 8

Energy Section, Resources
and Transport Division,
United Nations

Energy resources development
opportunities in developing countries,
with special reference to Latin America.
Information document N° 9

Jaime Baraqui, ECLA
Mexico Office

Centroamérica: Evaluación del impacto
de la crisis de energía en el trans-
porte automotor. Information
document N° 10 ***

E. Walter Robichek (IMF)

Recycling the oil export surpluses.
Information document N° 11

Shamsher Singh (IBRD)

Primary commodities: the outlook for
Latin America. Information document
N° 12 and Add.1

Bernardo F. Grossling,
U.S. Geological Survey

The prospects of Latin America's
petroleum in the energy crisis.
Information document N° 13

