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Lubbers Plan: Soviet Energy as a Standpoint for Improving Economic Reforms in the USSR*

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SOVIET ENERGY IN "LUBBERS PLAN": THE AIM OR THE MEANS?

The "Lubbers Plan" is not simply a programme of modernization of Soviet energy industries on the basis of international cooperation. It is a programme of stabilization for the entire Soviet economy, i.e. it is a macroeconomic programme. The starting point of its realisation is international cooperation in the energy sphere, but other sectors of the economy will also be involved.

The programme has a compensational character which would guarantee not only sufficient rates of profit on capital invested in the Soviet economy, but also the practical possibility to transfer this profit abroad. In addition, the Soviet side would receive some guaranteed flow of hard currency or of convertible goods and services as a result of production activity. The overall scale of cooperation depends directly upon the potential capacity of the Soviet export base to be opened up or expanded for realisation of the programme.

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SOVIET ENERGY EXPORT BASE EXPANSION: TRADITIONAL VS. NON-TRADITIONAL CHANNELS

One must evaluate the potential of prospective hard currency flow to the Soviet economy according to expansion principles: through traditional and non-traditional channels (see Figure 1).

Traditional channels of Soviet export, based on state structures, will become narrower in the transitional period. Non-traditional channels for Soviet export base expansion are still in an embryonic stage. Their development, caused by the necessity for immediate and more effective realisation of the "Lubbers Plan" requires, in considerable degree, a new economic-legal environment and other mechanisms of administration than those which currently exist. Below are three suggested channels for expansion of the export base, i.e. increasing the volume of exports:

- a) by extensive way—increasing the volumes of natural convertible resources involved in economic circulation by non-traditional means. For example, leasing oil fields into concession or signing some other type of agreements with foreign firms in mining industries;
- b) by intensive way—increasing the efficiency of utilization of natural resources involved in economic circulation, with consequent release of part of their current production for export. For example, energy savings in all stages of the energy chain from extraction to end-use,
- c) through increased "currency return" of the unit of exported energy resources by means of improving foreign trade operation mechanisms (non-traditional methods of foreign trade activity, where one gets increased export profits applying more flexible trade framework. For example through exchange operations with its hedging mechanisms and so on).

The first and the second non-traditional channels require direct foreign investments. That is why effective involvement of foreign and mixed capital through these channels presupposes undoubted regulation of relations concerning property ownership at all levels.

Figure 1. The Possible Channels of Soviet Oil Export Expansion.

TRADITIONAL EXPORT

Via state channels & structures :

MINNEFTEGAZPROM ---> SOYUZNEFTEEXPORT ---> WESTERN BUYERS

Crude oil:	1990	:	127.3	(million tonnes)
	1991	:	61 + 12.5	(million tonnes)

NON-TRADITIONAL EXPORT

Access to oil & products through:

- (1) Production activities (Western-Soviet petroleum agreements: concessions, production-sharing, risk-service, pure service)
 - JV with Soviet producers
 - 100% foreign participation agreements with resource owners
 - mixed forms
- (2) Technological activities outside oil production
 - in energy saving
 - in saving other production resources (labour, capital, materials)
- (3) Trade activities
 - via commodities & raw materials exchanges (Governmentally supported, independent)
 - Via commercial structures with foreign participation ("internal" export - for roubles; export via JV; barter via cooperation treaties with foreign partners)

	1990	:	0
	1991	:	?

Different means of export base expansion in this country require solving different problems (in number and in complexity) concerning property ownership relations:

- for its intensive expansion (outside mining industries) — "only" the questions of ownership on means of production need to be solved.
- for its extensive expansion (inside mining industries) — not only the questions of ownership on means of production need to be solved, but also the questions of ownership of subsurface natural resources).

The third "non-traditional" channel requires foreign participation mainly in the form of "intellectual" investments (education, know-how, etc.). This requires, as in the two previous cases, a resolution of the questions of "intellectual property." The problems of property ownership relations need to be resolved according to different ways of Soviet energy export base expansion which are shown in Figure 2.

In the USSR, export base expansion according to non-traditional channels is possible through adding onto the present operating economic system, i.e. with direct participation of vertically integrated state structures, and through the use of non-traditional (commercial) structures. The first direction presents a slow way of export expansion of the country, which has proved its low efficiency even in traditional export directions. So, we can hardly expect high efficiency of non-traditional export operations development by means of traditional structures. Therefore, it is quite necessary to develop non-traditional export operations mainly by non-traditional structures, i.e. not state, but commercial. It must predetermine the counter-interest of the USSR in development of non-traditional structures in domestic economy (especially of those industries that produce "convertible" goods and services). And that requires legally guaranteed freedom to create new productive property in all forms; for example, on the basis of further development of legislation concerning entrepreneurial activities in the USSR.

Thus, to efficiently increase the export potential of this country there is a necessity for a forced creation of an appropriate economic-legal environment. This must embrace all the aspects of entrepreneurial activities with immediate resolution of questions concerning the following:

- relations of ownership on the means of production;
- relations of ownership on the subsurface natural resources;
- commercial structures' activities.

GENERAL FORMS OF FOREIGN CAPITAL INVOLVEMENT IN SOVIET ENERGY SECTOR

In recent years the bottlenecks in the former long-term energy development strategy were sharply accentuated by new problems, which can be divided into social and economic ones. The cumulative effect of these factors can cause sharp slow-downs of the fuel-energy complex. So, if special measures are not applied, production slow-downs in 1995, according to one of the scenarios of Soviet energy development, could be 13% in oil production, 11% in oil refining and 8% in natural gas production (see Table 1).

Figure 2. The Problems of Property Ownership Relations Need to be Solved in order to expand the Soviet Energy Export Base Expansion

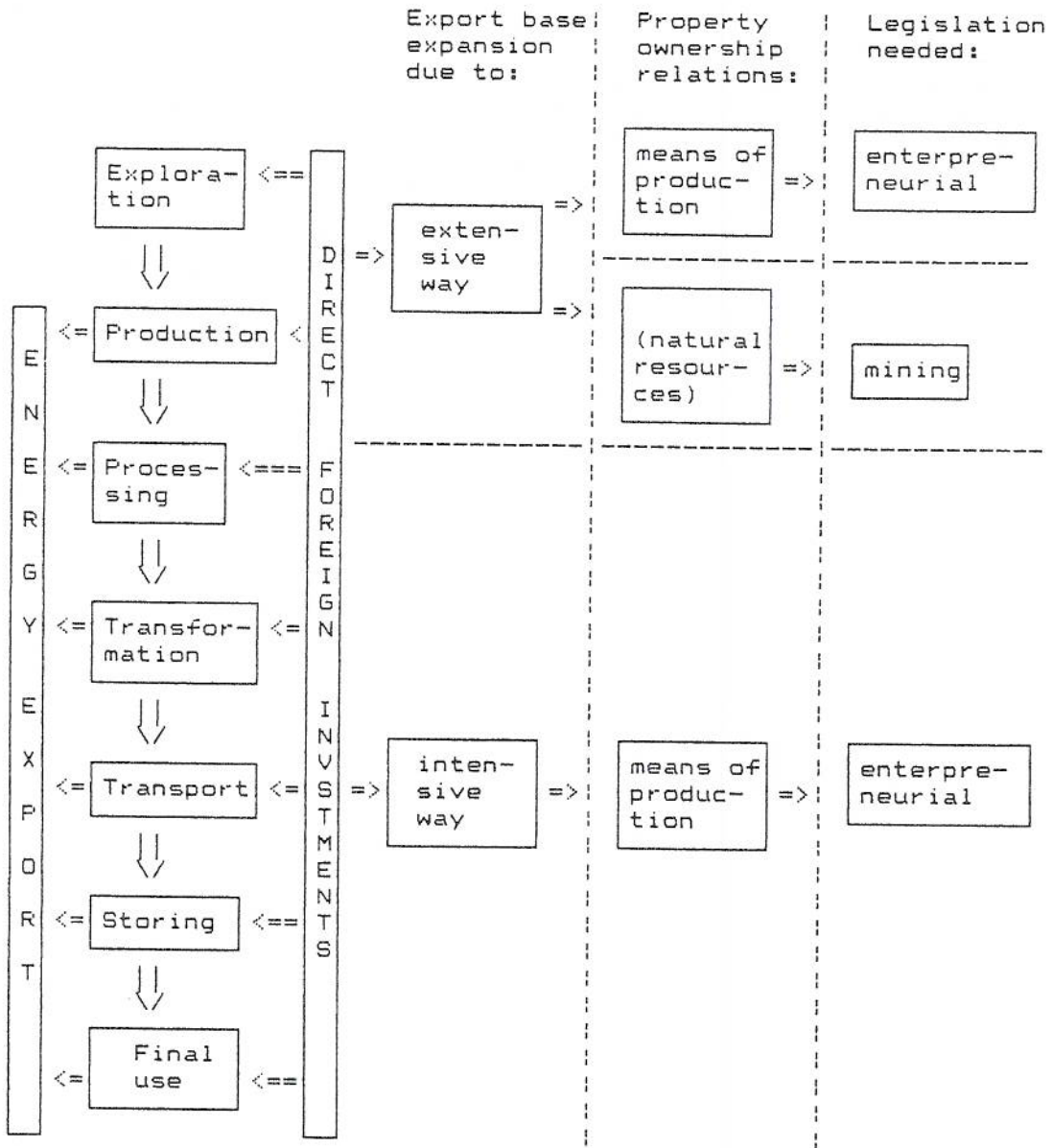


Table 1. Possible Slow-Down of Soviet Energy Development Due to Negative Social and Economic Factors.

	1990	1995 (*)	Production loss in 1995 due to factors:	
			Social	Economic
Oil Production (million tonnes)	570	575/500	20	55
Oil & Condensate Refining (million tonnes)	461	485/430	5	50
Natural Gas Production (billion cubic metres)	815	1030/950	40	40

Note: (*) In numerator: according to the USSR Council of Ministers programme, approved by the Second Congress of People's Deputies. In denominator: expected if negative tendencies were continuing.

In Table 2 one can find a list of immediate measures for elimination of possible failures in energy development. In the failure scenario, a "holding back" or "slow down" effect may occur in the normal rates of economic growth. That would prolong the resolution of food and housing problems by an estimated 7-10 years, and cause increased social tensions in Soviet society.

Scenario models of USSR energy development used as the database for this paper were prepared by the USSR Academy of Sciences Commission, which is responsible for elaboration of alternative scenarios for energy development. They are based on the assumption of immediate realisation of such measures. Such an approach opens additional opportunities for foreign capital involvement for mutually beneficial resolution of the USSR's energy development problems. Prospective forms of Western participation in the form of indicated immediate measures are shown in Table 2. If the possible production slow-down shown in Table 1 could be prevented, then part of the saved production (75 million tonnes of oil, 55 million tonnes of oil products and 80 billion cubic metres of natural gas), could be used for compensation of foreign firms' costs and guarantee them sufficient (reasonable) rates of profit. It could become a starting point for Soviet energy export base expansion through extensive means.

To materialize optimal—through Commission's point of view—scenarios of the USSR's energy development, a cardinal technical modernisation of energy-

Table 2. Prospective Western Involvement in Immediate Measures for Elimination of Negative Social and Economic Factors Constraining Soviet Energy Development.

MEASURES	FORMS OF WESTERN INVOLVEMENT
1. Ecological improvement of energy units.	Export of equipment, know-how, education, direct investments.
2. Popularization of positive experience in solving social, ecological and safety problems of energy units.	Publicity, education.
3. Revision in the order of financing, material supply, construction and reconstruction of energy units.	Direct investments, education.
4. Intensification of energy saving and STP.	Export of equipment, know-how, education, direct investments.
5. Legal ensuring of safety energy supplies.	Western experience in regulating relations between consumers, local authorities and energy companies, education.
6. Solving of social problems in the locations of energy units.	Western experience in regulating relations between inhabitants, local authorities and energy companies, education.
7. Legal regulation of relations between land- and natural resource-owners and energy units.	Western experience in natural resources legislation, education.

-producing industries as well as of most energy-consumers is needed. Analysis of more than 500 improved technologies showed that in conditions of limited investments the most effective use of the latter can be achieved in the following three areas:

- (1) energy-saving and its rational use (approximately 100 technologies);
- (2) extraction, processing and utilization of hydrocarbons (more than 120 innovations);
- (3) rational use of natural gas in the course of its transportation (gas pipelines, electricity generation and heat supply on the basis of mass-scale use of gas-turbines and steam-gas units).

Table 3. Macroeconomic Efficiency of Three Top Priorities in Energy Sphere for 1991-2010 Period

	Energy Saving	Motor Fuel & Petrochemical Feedstock	Natural Gas Use	Total
Investment required, (billion rubles)	35-40	100	15-20	150-160
\$ equivalent:				
- \$1.8 Rb/\$	19-22	56	8-11	83-89
- 25 Rb/\$	1.4-1.6	4.0	0.6-0.8	6.0-6.4
<u>Macroeconomic Efficiency</u>				
Investment saved for the period, (billion rubles)	100	125	25-30	250-255
\$ equivalent:				
-1.8 Rb/\$	56	73	14-17	143-146
-25 Rb/\$	4.0	5.0	1.0-1.2	10.0-10.2
Energy saved in 2010 (mtce)	750-800	-	100	850-900
Resource base enlargement in 2010, (mtce)	-	570	-	570
Persons engaged decrease in 2010 (million)	-	0.6	1.5	2.1

The overall economic effect of the above three measures is shown in Table 3. To illustrate the possibilities for scientific-technical progress (STP) it is necessary to first make the Soviet economy susceptible to R & D achievements and, secondly, to lead domestic engineering industries (metallurgy, chemistry and the other supplying energy-supporting industries) to world level. Without these preconditions it is impossible to carry out new structural and technical policy in the energy development field.

So, taking scientific and technical progress as a standpoint, it is clear that the prospects of bringing about the ideas of "Lubbers Plan" are not limited to only the energy industries, but they embrace and penetrate into all economic structures of this country and are aimed in the first place at the creation of a corresponding "nutritious" economic environment, stimulating effective Soviet

economic development without urging from the top management level (Government bodies). The portion of energy resources saved through these measures (see Table 3) could be used for compensation of direct foreign capital participation. That would expand the Soviet energy export base through intensive means.

FOREIGN CAPITAL IN SOVIET ENERGY PRODUCTION: CURRENT STATUTE AND RECENT CHANGES

There is great potential connected with extensive expansion of the Soviet energy export base, since it practically has no upper limit. But at the same time it is less prepared for foreign capital involvement from an economic-legal point of view.

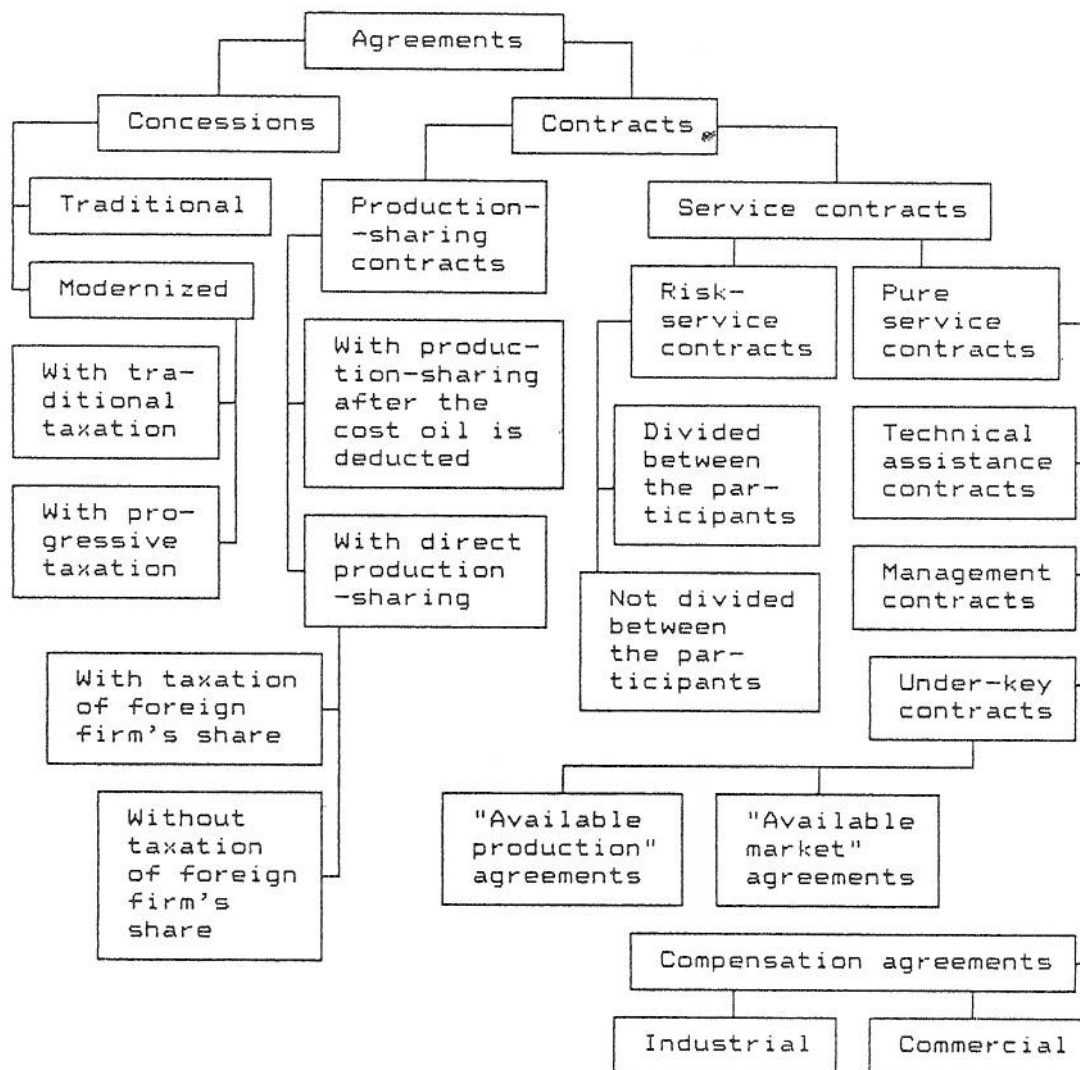
The current wave of foreign investments is the third in Russian and Soviet history. The latest wave began in January 1987 and was based on the well-known USSR Council of Ministers Decrees N48 and N49 of January 13, 1987 (concerning the creation and activity of joint ventures on the USSR territory), N1074 of September 17, 1987 (about additional measures to improve foreign economic relations activity) and so on. The development of relations with foreign capital up to October 26, 1990 predetermined Joint Venture (JV) as the only single organisational form for foreign involvement in the national economy. However, international practice, and our own historical experience of the 1920s (the period of Lenin's "new economic policy"), has shown that the more economic mechanisms differ in the countries which establish JVs, the less efficient they will be.

Due to the unstable economic-legal environment, underdeveloped infrastructure and some other factors in oil industry, only 7 JVs currently operate and 50 others are in the establishment stage. Compared to the scale of domestic oil industry development, it is a mere drop in the ocean.

The smallest number of registered JVs—less than 1/25 of their total number, are in the industries that produce the main export goods of the USSR. In comparison with the other economic spheres, JVs in those industries are the largest, judging by their statutory funds: \$6.3 million/JV against the USSR average of \$1.9 million/JV if roubles are transferred to dollars according to commercial exchange rate (1.8 roubles/dollar). But taking into account international practice and especially energy projects' capital-intensity, it is quite a small figure.

So we can conclude that now only small foreign firms and in very small quantities dare to penetrate into the Soviet energy sector, in particular in the sphere of energy resources. One cannot consider it possible to solve serious economic problems with such scales of foreign capital involvement.

Figure 3. Classification of Petroleum Agreements Currently in International Practice.



Therefore, in spite of the fact that JVs now have certain additional tax advantages in comparison with analogous pure Soviet enterprises, foreign participation in the Soviet energy sector is being developed without stimulation from the economic-legal environment's side. For example, there is no mining legislation. In addition, property ownership relations between the Union and the Republics are not regulated clearly enough. Legitimate rules concerning enterprises with foreign participation were prepared without taking into account the specific character of mining industries. It seems these rules totally neglect the existence of mining rent.

The practice of JV creation (at least in the sphere of energy resources) differs considerably in this country from Western norms and traditions. Classification of corresponding agreements which regulate interrelations between the host country and foreign firms in this sphere is significantly wider in the West than in the USSR (see Figure 3). In addition, the spectrum of financial instruments regulating these interrelations in Western practice is more diversified and complex than in the USSR.

So we can conclude that today there is no economic-legal environment in this country to attract foreign capital to the energy sector according to practices generally adopted in Western-style contracts. This is reflected first of all by the absence of mining legislation. The Presidential Decree of October 26, 1990, that created possibilities for establishment on Soviet territory the firms with 100% foreign participation, does not eliminate the bottlenecks of our economic-legal environment, and contradictions still exist between Union and Republics regarding the questions of property ownership. Article 7 of the project of Union Treaty proclaims that Republics are the owners of the surface, subsurface and other natural resources. But there is no response to some other questions connected with property ownership relations. These factors increase the risk of foreign investments in the USSR and reduce the possibilities for Soviet export base growth (in its expansive meaning) through this channel.

At the same time, foreign capital involvement in the form of 100% foreign participation with modern technologies, know-how and administration skills, can lead to a reduction of exploration and production costs. That could enlarge the economically proven resource base of energy producing industries. It could also considerably increase volumes of production with further export of portions of this additional oil.

Further liberalization of foreign participation in Soviet energy industries is quite necessary. A general liberalization in conditions of entrepreneurial activities in this country is also necessary. There is principal understanding of this task in administrative structures. But its realization is prevented today by the need to solve immediate financial problems of the country (in general - by fiscal instruments). In addition, the process of involvement of foreign capital in domestic energy industries is rather unpopular among a considerable part of

population brought-up on Soviet ideology and the deputies-populists, who support that part of the population.

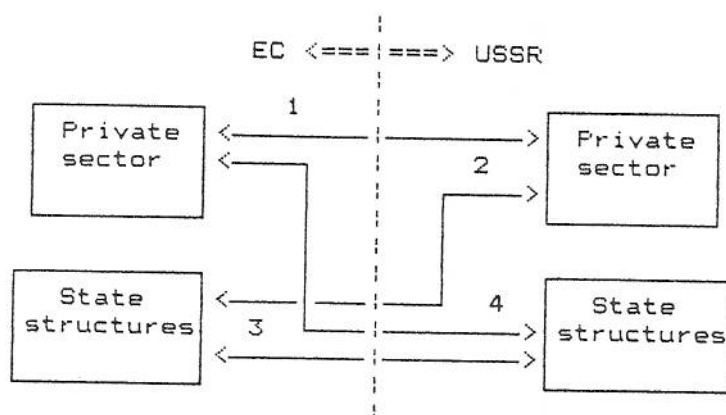
That is why, besides the establishment of political-legal regimes of entrepreneurial activities in the USSR, there is an urgent necessity to explain certain elements of this regime to the population.

FINANCIAL ASPECTS OF LUBBERS PLAN AND NEW ECONOMIC ENVIRONMENT IN THE USSR

Effective resolution of financial questions is a key element in the realization of the "Lubbers Plan" and in the creation of a European Energy Community.

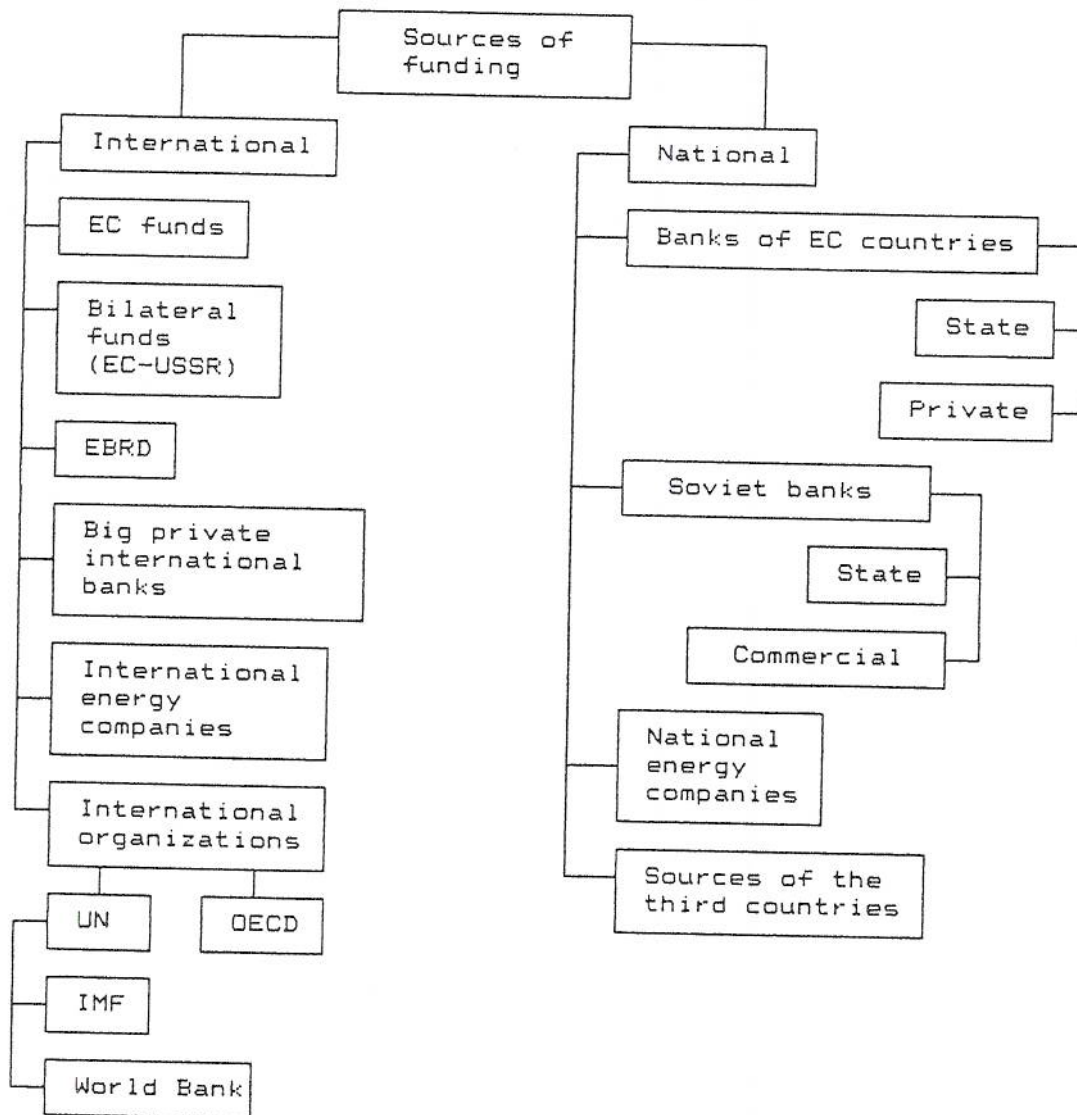
Proceeding from necessity of involvement to cooperation of both government and non-government structures on both sides, there are four main types of links (see Figure 4). In order to simplify Figure 4, classification was made according to the dominant type of property for the structures involved in cooperation.

Figure 4. Main Types of Soviet and Western Country Links for more International Cooperation in the framework of the European Energy Community



Note: Numbers reflect author's understanding of decreasing significance of cooperation links for Western Side.

Figure 5. Potential Sources of Project Financing in the Framework of European Energy Community



At the same time one can see there is a wide enough number of potential sources of funding (international and national), eligible for "Lubbers Plan" projects (see Figure 5).

Comparing the nomenclature of cooperation channels (Figure 4) and the sources of its funding (Figure 5) one has to admit that not only private banks, but also a majority of the international financial institutions prefer to fund mainly commercial structures on the Soviet side, but not state structures which have proven their low efficiency. Therefore, the scale of external funding sources depends upon the rate of development of market structures in the Soviet economy in general, and the energy sector in particular.

Taking into account the great inertia of energy industries, it is clear they require additional adjustments to stimulate their transfer to the market. One such adjustment that could stimulate more effective involvement of foreign producing capital to the national economy may be the creation of parallel market structures. This way would be similar to Lenin's "concession policy" scenario in its economic aspects. For example, a parallel (or alternative) oil economy could be based not on vertical ministerial hierarchy, connected through Gosplan, Gossnab and other ministerial-type upper management bodies with their distributional functions, but on the whole complex of direct contractual links between economic subjects (Soviet, foreign and of mixed type), connected through exchanges, and their links with natural resource-owners. In this case, state administrative bodies fulfil not distributional, but only regulating functions and only through economic mechanisms. Agreements between resource-owner and contractor on the one hand, and between contractor and subcontractor on the other hand, can form the foundation of these contractual links. The economic environment necessary for this can be created gradually. In particular, the process of establishing a framework of regional exchange-type structures is rather intensive in the USSR. At least 16 regional commodity and raw materials exchanges now deal, or have expressed their intentions to deal, with energy resources. According to the RSFSR Council of Ministers Decree concerning commodity exchange activities in Russia, enterprises and organisations can sell commodities produced over state order levels and over inter-republic commitments through exchange at free prices. Although existing volumes of exchange trade are still very small, principal schemes of liquid fuel flows to the channels of exchange trade being created in the USSR are quite different and generally tend to be on the increase.