



**Doc. 821**

30 April 1958

## **Making available to Europe the important natural gas resources of the Northern Sahara**

### **Motion for a recommendation**

tabled by Mr Marcel LEMAIRE and other members of the Assembly

The Assembly,

Considering the importance of the economic problems raised by the creation of the European Economic Community and the setting up of a Free Trade Area;

Considering the vital importance of European energy supplies;

Considering that in their objective Report for Euratom the " Wise Men " forecast that for the next twenty years there will be an aggregate power shortage in the countries of the Six corresponding to more than 200 million tons of coal a year;

Considering that in the French Northern Sahara there are, apart from petroleum, several hundred thousand million cubic metres of reserves of natural gas which by themselves could each year make good a large part of the above deficit;

Considering that, though France can undertake the exploitation of these reserves from her own resources, the problem of distributing this natural gas raises extremely important questions of financing, as well as technical and economic problems of interest to Europe (the possible establishment of a fleet of " gas tankers » and, in particular, the construction of pipelines passing through Spain and France into the various countries of Europe, including Great Britain) ;

Considering the importance of these questions for Africa as well as for Europe in relation to the prospects opened up by the Strasbourg Plan in accordance with Recommendation 26 (1952) of the Assembly,

Recommends to the Committee of Ministers that it should invite the Governments concerned to open negotiations for the study and - realisation of a large-scale plan for transporting to, and distributing in, Europe the natural gas produced in the Northern Sahara reserves, the potential of which could by itself make good a large part of the serious shortage of power which it is forecast will obtain in Western Europe and North Africa for the next twenty years. Such action would be a major contribution to the building of Eurafrica and to the success of the European Economic Community and a Free Trade Area.

### **Explanatory Memorandum**

It is now certain that French Northern Sahara possesses considerable natural gas resources. Prospecting in the Sahara subsoil, however recent and incomplete it may be, has already to its credit two discoveries of international significance. The first is that of the Hassi-Messaoud deposit south-west of Ouargla which contains petroleum producing 200 cubic metres of gas per extracted ton. The boundaries of this deposit have not yet been ascertained, nor, consequently, its potential reserves. Cautious official estimates give only a very rough idea. It is, nevertheless, certain that within 3 years Hassi-Messaoud could produce 25 million tons delivered to the Mediterranean coast at an amply competitive price.



The degasification of the crude petroleum thus produced will result in the simultaneous production of 4,500 million cubic metres of natural gas.

The second discovery, made in November 1956, directly concerns natural gas, the discovery of the gas deposit at Hassi R'Mel 150 kilometres north-west of Ghardaia and 450 kilometres as the crow flies from the Mediterranean coast. The reserves in this deposit have so far only been provisionally and cautiously estimated, but they appear considerable. A highly probable figure would be 500,000 million cubic metres. The exploitation of such a deposit at normal rate would permit the extraction of 25,000 million cubic metres a year.

Altogether, it does not seem unreasonable to suggest that the Northern Sahara could produce 50,000 million cubic metres of natural gas, the equivalent of 75 million tons of coal, or the whole of French consumption and more than half her aggregate consumption of power of all kinds. The natural gas of the Northern Sahara could thus not only make good the shortage in France's power supplies but go a long way towards meeting the needs of Europe.

Nothing is more urgent than to eliminate the growing shortage of power in European countries, whose production remains stable, whilst their consumption is going up each year by approximately 3.5 per cent. As long as nuclear energy has not effectively taken over from traditional sources of power, the difference can only be met by imports which in turn give rise to a shortage of foreign currency in certain countries, uncertainty of supplies, and a gradual increase in the cost of power.

If this alarming situation is put right, it will not only be an insurance for the future of European economy, but will afford the best prospects to the Common Market and to the building of a Free Trade Area.

In this connexion it must be added that natural gas opens up immense possibilities in fields other than that of power. It is a basic raw material for use in the chemical industry and petroleum chemistry, and the manufacture of ammonia, nitrate fertilisers, synthetic fibres and plastics.

In this way Europe would be giving to natural gas a position comparable with that which it enjoys today in the United States and with that which it will have in the near future in the U. S. S. R.

In the United States natural gas has made very considerable progress in the past twenty years. It has become the least expensive source of energy wherever it is used. 1957 production reached 300,000 million cubic metres and represents one-third of the energy consumption of a country which is criss-crossed by more than 300,000 kilometres of pipelines, some of which are as long as 3,000 kilometres.

In Soviet Russia the figures are for the time being more modest, but the rate of progress is even more rapid. Production scheduled for 1960 is 40,000 million cubic metres and there is every expectation that it will be greatly exceeded.

There remains the problem of bringing the output of the Northern Sahara to Europe, while supplying North Africa en route.

The construction of such a transport and distribution network calls for diplomatic negotiations which, in view of the advantages which would accrue to the countries concerned, could, it seems, be speedily concluded.

Technically, the operation is easily practicable. Financially, it is a highly paying proposition. There are, however, two obstacles to be mentioned—the sea and the distance involved; neither is insurmountable.

There are several ways in which the crossing of the Mediterranean could be effected .• either at Gibraltar (a submarine tunnel, floating tunnel, or suspension bridge), or at other points (submarine pipelines or transport by tankers carrying the liquefied gas). All of these appear to be perfectly practicable.

The distance between the Hassi-R'Mel deposit and Strasbourg (centre of gravity of Western Europe), by way of Gibraltar, Spain and the Rhone Valley, is 2,800 kilometres. This is comparable with the length of the big American pipelines—and substantially less than that of the pipeline now being completed in Canada between Alberta and Montreal.

On the other hand, the transport of gas by high pressure pipeline is extremely cheap if large quantities are carried, and the rate of supply called for fluctuates as little as possible. Sound estimates have shown that a cubic metre of gas costing 1 to 2 francs at source would, if transported in a large pipeline, cost about 6 francs on arrival at Strasbourg—in other words, a much lower price than that of all other forms of energy at present available.

It is therefore most important that there should be no further delay in carrying out this project. France would retain ownership of the deposits and continue to exploit them—and would assure the expenditure involved. As regards the work of transport and distribution, the interested European countries would make a financial contribution commensurate with the extent to which the project would help in the development of their respective economies

An agreement would include precise guarantees from these countries through which the pipelines pass. The countries concerned themselves would, moreover, be especially interested in seeing the plan put into effect. Negotiations to this end should begin without delay.

Thus would be laid the foundation stone of the Eurafrikan economic structure which will perhaps ensure the stability of the world of tomorrow.

*Signed (see overleaf)*

*Doc. 821 Motion for a recommendation*

*Signed:*

LEMAIRE Marcel, France