

Photography by Grahame Lemon

# TOWARDS SURVIVAL

and  
Information for Survival Digest

in Association with

# RESURGENCE

## SUPPLEMENT

**M40 PUBLIC ENQUIRY  
Objections to the M40  
(Warwick to Umberlade)  
proposals, prepared for the  
Inspector, Major-General  
Raymond Edge, by Keith  
Hudson, industrial chemist  
and Council member of the  
Conservation Society.**

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Sir,

The importance of this public enquiry cannot be overestimated. It comes at a time when events in the international energy scene are changing rapidly. In this submission I hope to present evidence that will enable you, in your report, to recommend to the Secretary of State for the Environment that the construction of this motorway be delayed in the national interest. I would submit that a major enquiry should be undertaken by the Government in order to assess the availability of fuel imports in the coming years sufficient to satisfy the motive power requirements implied in the proposed extensions to the motorway network.

Indeed, I would also like to suggest that there is already sufficient evidence for you to postpone this enquiry, as it is in your power to do, and not to reconvene it until the Department of the Environment is able to present evidence of a more fundamental nature than it has done so far: that there is likely to be a fulfilled need for this motorway over its lifetime. To say this is not to disparage the quality of the evidence presented by the Department. In Document 1, *Strategic Studies Information*, a most impressive case is presented on the basis of present and anticipated traffic flows. However, this evidence assumes that secular economic growth will continue at certain exponential rates. I shall endeavour in this submission to suggest that these assumptions are suspect and that the most responsible policy this country could adopt at the present time would be to restrain what now threatens to be a stampede in economic growth and to carefully reduce our total hardware activities to a level which is sustainable for our children and their children.

In contrast to the quality of the evidence submitted by the Department it is most unsatisfactory that the strategy that has been adopted has been to divide up the proposed M40 extensions into smaller parcels. This is perhaps the best way to accommodate local objectors to route, but there is also a clear need for a substantial enquiry when weighty arguments of a national policy character can be presented. These matters would include indigenous material resources, agricultural policies and fuel policies.

As it is, we are obliged to repeat national objections at all the local enquiries. Another option may therefore commend itself to you: that you suggest to the Secretary of State that, in addition to these local enquiries, an overall M40 enquiry be held, or even a Royal Commission.

I should now like to present my Submission:

## Submission

### I Summary

Our present industrial economy depends mainly on hydrocarbon fuels. This is likely to remain so for the rest of this century. Surface transport is not only dependent on general industrial output but also intrinsically dependent on the same hydrocarbon fuels.

The total supply of these fuels from indigenous and foreign sources is likely to decline substantially. Quite apart from the serious economic problems this will bring, it also means that further substantial investments in motorways at the present time would be an unwise use of resources.

### II Alternative Sources of Motive Power for Road Transport

Before hydrocarbon fuels are discussed it is necessary to examine possible alternative power systems for road transport.

#### A

Electricity is the most frequently proposed alternative. At the present time only slightly more than 1 per cent of all electricity generated is used for transport purposes (Table 95, *Facts in Focus*, Penguin-Central Statistical Office) and most of this is for the railway system. The amount of electricity used by vehicles such as milk floats and factory stackatrucks is vanishingly small.

Even assuming that a sufficient generating capacity would be available to support a significant change to electrical propulsion, it must be seriously doubted whether there are sufficient resources for the required conventional battery systems, either lead/acid or nickel/alkali. World reserve figures for lead and nickel are  $91 \times 10^6$  tons and  $147 \times 10^9$  lbs respectively (Source, U.S. Bureau of Mines, *Mineral Facts and Problems*, 1970), and, at average growth rates of usage (2.0 and 3.4 per cent) resource lifetimes work out at 21 years and 53 years. Large scale use of either of these metals in this country and/or Western Europe for vehicle batteries would shorten these resource lifetimes considerably. Further supplies would be exorbitantly expensive from electrolysis of sea water (for lead) or from deep sea nodule mining (for nickel). Other batteries, such as the sodium-sulphur high temperature systems, have been under intensive study for many years, notably in this country by British Railways at Derby, but the problems are formidable and prospects cannot be viewed with any degree of optimism.

As already said, all this is assuming that a sufficient supply of electricity will be available. As I will show later we cannot rely on sufficient coal, oil or natural gas being available for sufficient additional power station generation for wide scale electrical propulsion, so other sources must now be considered:

(a) *Hydro-Electricity.* Table 1 below (*U.K. Digest of Energy Statistics* 1971) shows that hydro-electricity at the present time comprises about 2 per cent of total electrical production in this country. Most of our hydro-electricity comes from Scotland. The Mackenzie Report of 1962 (H.M.S.O. Cmd. 1859) suggests that the North of Scotland Hydro Board could extend its output capacity of 1,002MW to perhaps 1,564MW or even 1,964MW. With perhaps further feasible schemes from Wales it is unlikely that hydro-electricity could supply more than 3 per cent of total production at any time.

**Table 1**  
**U.K. Fuels for Electrical Generation**

Fuel	millions of tons of coal equivalent					
	1960	1965	1968	1969	1970	1971
Coal	51.9	70.0	73.2	75.9	76.0	71.4
Oil	9.2	10.7	10.9	14.1	21.1	24.5
Natural Gas	nil	nil	nil	0.1	0.2	1.0
Nuclear Electricity	0.9	6.0	10.1	10.5	9.4	9.8
Hydro Electricity	1.7	2.3	1.8	1.7	2.3	1.8
Net imports	nil	0.1	0.4	0.3	0.1	0.1
Secondary fuel—coke and Breeze	0.8	0.4	0.4	0.1	nil	0.1
<b>Total</b>	<b>64.5</b>	<b>89.4</b>	<b>96.8</b>	<b>102.7</b>	<b>109.3</b>	<b>108.7</b>

(b) *Tidal Electricity.* The only significant tidal power station in the world is at St. Malo in France and produces 240MW. The only suitable site in this country is the Bristol Channel with its 40ft tides. But this could supply only minuscule amounts.

(c) *Dry Steam and Hot Water Geothermal Electricity.* Although there are many sources of geothermal energy in the world, notably at Larderello (Italy) and Waikakei (New Zealand) there do not appear to be any suitable subterranean volcanic areas in this country from which superheated steam or water may be tapped.

(d) *Hot Rock Geothermal Electricity.* This recent proposal by Professor Rex of California University, in which twin wells are drilled to depths of 20,000ft and input water pumped down and recycled therefrom at temperatures of 300° to 500°F, does seem promising. However, the lead time for this technology must be considerable, particularly as no research is being undertaken in this country. Even if it does become feasible it is unlikely to be a significant supplier of electricity for at least two or three decades.

(e) *Wind-generated Electricity.* A few small windmills provide electricity for isolated houses in this country. A 100KW generator built at Costahead, Orkney, in 1951, was abandoned after four years. This is a potentially viable source of electricity but only in

small amounts. Such installations would be feasible in a few regions of steady high winds and associated with local pumped water storage schemes and, probably, local industry.

(f) *Nuclear Fission Electricity.* Table 1 shows that this is already a significant supplier of electricity in this country. The following figures (Table 2) shows that we were the earliest leaders in this field and are only due to be overtaken this year:

**Table 2**  
**Cumulative Generation (MWh x 10<sup>6</sup>) at year end**

Country	1960	1970	1972
United Kingdom	45.3	175.5	232.7
United States	17.1	84.5	183.2
France	3.3	21.8	46.2
West Germany	0.4	14.6	29.2
Italy	6.1	20.7	27.7
Japan		6.1	21.6

However, the ordering of nuclear power stations has been static in this country since 1967, and before 1975 the cumulative ordered capacity will have been overtaken by all the above countries with the probable addition of Spain.

The reason why this country has been slow in developing power *vis-à-vis* other countries is due mainly to the careful pace of research and development in this country from the original Magnox reactors to the latest Advanced Gas-Cooled Reactors. The growth of nuclear and development in this country from the original Magnox reactors to the later Advanced Gas-Cooled Reactors. The growth of nuclear power in the rest of the world depends almost entirely on one particular American design, the light water reactor, of questionable dependability. In this country considerable reservations are held about this reactor and many experts would far sooner rely on the development of our own designs. However, even if we were to construct relatively cheap light water reactors on a large scale it is doubtful whether we should be able to afford to invest or build at a rate sufficient to satisfy even modest growth requirements for electricity by the end of the century. According to Mr. R. L. R. Nicholson, an economist of the UK Atomic Energy Authority ("The Nuclear Power Paradox in the U.K.", *Energy Policy*, Volume 1, Number 1, June 1973.), a growth of 2½ per cent would indicate an installed nuclear capacity of 120 to 150GWe by the year 2000. This would imply a building rate of 4 to 5,000MWe of nuclear stations (approximately three) per annum in the near future rising to 8 to 12,000MWe during the 1990s. Assuming a very conservative investment figure of £150 million per 1GWe I calculate that this programme would involve annual investments rising to at

least £1,500 million. It would seem unlikely that such an investment could be afforded. And this scale of investment, it must be noted, does not make a significant contribution towards electrical propulsion; it is merely an extrapolation of present changes in the industry energy "mix". If further electricity supplies are needed for any significant electrical propulsion programme then we should be committed to at least £2 billion a year in power station investment alone long before the end of the century. This would not include investments in the vehicles themselves.

(g) *Nuclear Fusion Electricity.* There appears to be formidable problems in the feasibility of controlled thermonuclear fusion (Dr. R. S. Pease, "Culham Laboratory", *Atom*, Number 200, June 1973, UKAEA). These problems include plasma stability and confinement, thermal insulation of a high order, injection of deuterium and tritium fuels into a high temperature regime and the extraction of electricity from the plasma heat. Practicable fusion power stations, if at all feasible, appear to be at least two or three decades away.

(h) *Solar-generated Electricity.* Studies at the Oak Ridge National Laboratory in the United States (Alvin M. Weinberg, "Long-Range Approaches for Resolving the Energy Crisis", *Towards Survival*, Number 9, March 1973) indicate that the investment costs of solar power stations would be at least three or four times present systems. In any case, solar energy would be viable only in those countries with long hours of unobscured sunlight. Transmission costs would preclude this country from tapping electricity from solar power stations in other countries, say North Africa. Solar power units might be feasible for this country but only for small equipment in remote locations (e.g. marine buoys or micro-wave repeater stations) not for electricity generation.

## B

Several other alternative sources of energy for transportation have been proposed:

(a) *Natural Gas.* The world production curve for natural gas (see Figure 1) and the costs involved, are almost identical to those of oil and will be discussed in the appropriate section below.

(b) *Synthetic Fuel from UK Coal.* This is quite feasible and will probably depend on the relative costs of imported oil and home-produced coal over the next few years. However, whatever quantity of coal is deflected to the purpose of manufacturing synthetic petroleum and diesel, this same amount will be taken from the amount available for other purposes, particularly electricity generation. Despite the considerable investments of over £1 billion announced last year by Mr. Peter Walker of the DoTI for the next several years, this would go largely to maintain present production levels. To increase coal production to any significant extent would take many years and a high level of investment even assuming that a

sufficient number of recruits could be attracted to the coal mining industry. The large scale derivation of synthetic fuels from coal must be considered a long term prospect.

(c) *Hydrogen, Methanol, Hydrazine and Ammonia.* All of these fuels have been proposed for transport uses in the event of non-availability of fuels derived from fossil sources. All of these would be obtainable from syntheses based on electrolytic hydrogen, as it seems likely that chemical routes for hydrogen are thermodynamically unfeasible and uneconomically unviable. (G. V. Day, of the UKAEA, "The Prospects for Synthetic Fuels in the UK", *Futures*, Volume 4, Number 4.) Methanol, for example, could be synthesised from the carbon dioxide obtainable from limestone, and combined with electrolytic hydrogen. The investment costs of some of these fuels are of interest. These are compared with the costs presently obtaining for imported oil:

Table 3  
Capital Investment in Energy Systems

System	Total Investment (£/annual ton of oil equivalent)
Foreign oil refining	22-27
Synthetic petrol from U.K. coal	50-80
Methanol	430-470
Hydrogen	415-445

(The synthesis costs for hydrazine and ammonia would be similar to methanol and hydrogen above.)

The conclusion of the foregoing section must therefore be that there are no readily available or economically feasible alternative energy sources for transport uses if oil or natural gas resources decline appreciably from present levels. I shall now argue that such a decline in fossil fuels is not only likely, but imminent.

### III Dependency on Imported Fuels

Table 4 below shows the recent history of oil consumption in this country and sources of origin:

**Table 4**  
United Kingdom imports of crude and process oils  
(*Facts in Focus*, page 126)

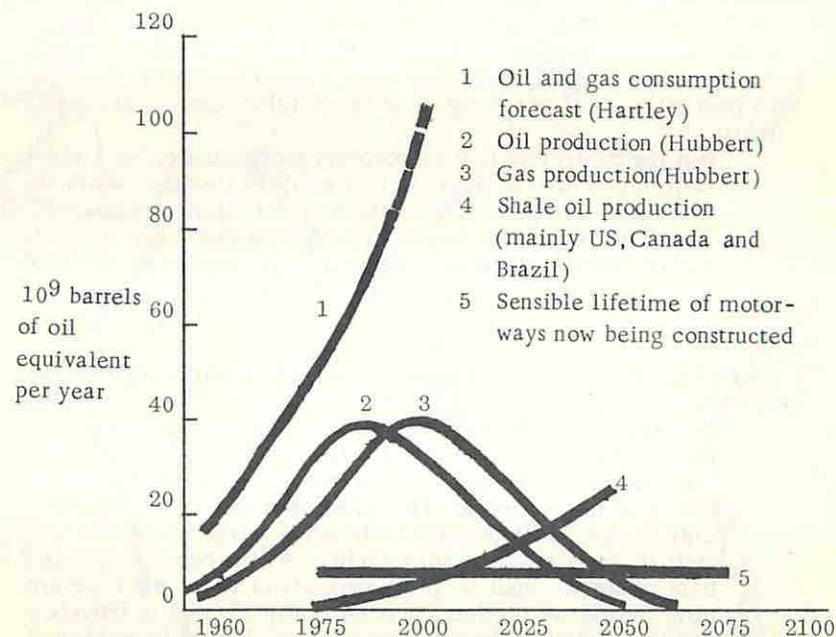
Country of Origin	million tons		
	1960	1965	1970
Middle East:			
Kuwait	21.9	14.2	23.8
Iran	5.2	4.1	8.8
Iraq	7.0	10.4	2.4
Saudi Arabia	1.2	4.4	14.9
Other Middle East	0.8	3.6	8.7
Western Hemisphere			
Venezuela	5.5	7.5	4.8
Other	1.9	1.7	0.6
Other countries			
Libya	nil	11.2	23.8
Nigeria	0.7	6.8	7.6
Netherlands	0.3	1.1	0.5
All Other	0.1	0.7	5.6
<b>Total</b>	<b>44.6</b>	<b>65.7</b>	<b>101.5</b>

It will be seen from these figures that, in 1970, 58.6 per cent of our oil came from the Middle East and a further 31.4 per cent came from African countries. This overwhelming dependence on foreign oil is of crucial importance. I will now consider the reserves in these countries together with North Sea reserves.

### IV Expert Estimates of Oil Reserves

One must be very wary of saying that there are so many billion barrels of oil and that it will run out in this or that year. A more accurate way of describing the situation is to imagine the amount available oil as a gently rising curve as shown in curves 2 and 3 in Figure 1 below.

Figure 1



Another way of looking at the situation is to divide the amount of oil already discovered by the world annual production. This gives us an important ratio. A decade or so ago this ratio was about 35, that is, there were sufficient reserves discovered for a further 35 years' use. The ratio is now approaching 20. There has never been so much prospecting as in recent years and the number of finds is declining. Therefore, even though there are many small, medium and even large oil fields awaiting discovery, we cannot avoid the ratio becoming smaller every year. Meanwhile consumption is rising exponentially as the above curves show. Recently a Shell Oil spokesman said that in the next ten years Western countries will use as much as in the previous 110 years.

In fact, petroleum geologists have a very good idea of where further reserves are likely to be found. With a knowledge of the shifting of continental land masses over the last few hundred million years, and the location of primeval river estuaries (where rotting vegetation was laid down on the sea bed), geologists now have a very shrewd idea of future reserves even if they have not put down exploratory drills in every case. So much so is this that geologists now talk in terms of discovered and *undiscovered* oil deposits with a fair degree of certainty. Generally speaking, most experts agree on about 2,000 billion barrels of oil as being the top limit that will ever be found—or rather *recoverable*. No oil field can ever be completely drained and a 50 per cent recovery is good going. In the following quotation, Dr. H. R. Warman, British Petroleum's chief geologist, writing in the *Petroleum Times* (March 1971) makes his own estimate of how long these recoverable reserves are going to last:

“It is my contention that no recovery techniques either known or foreseen can, in the next two or three decades, seriously alter the recovery rate used as the basis for estimating reserves. The total recoverable reserves of oil are about 1,600 to 1,800 billion barrels; *well under half* the amount needed by AD 2000 if demand continues to grow at the rate of 7.5 per cent a year”.

(My emphasis)

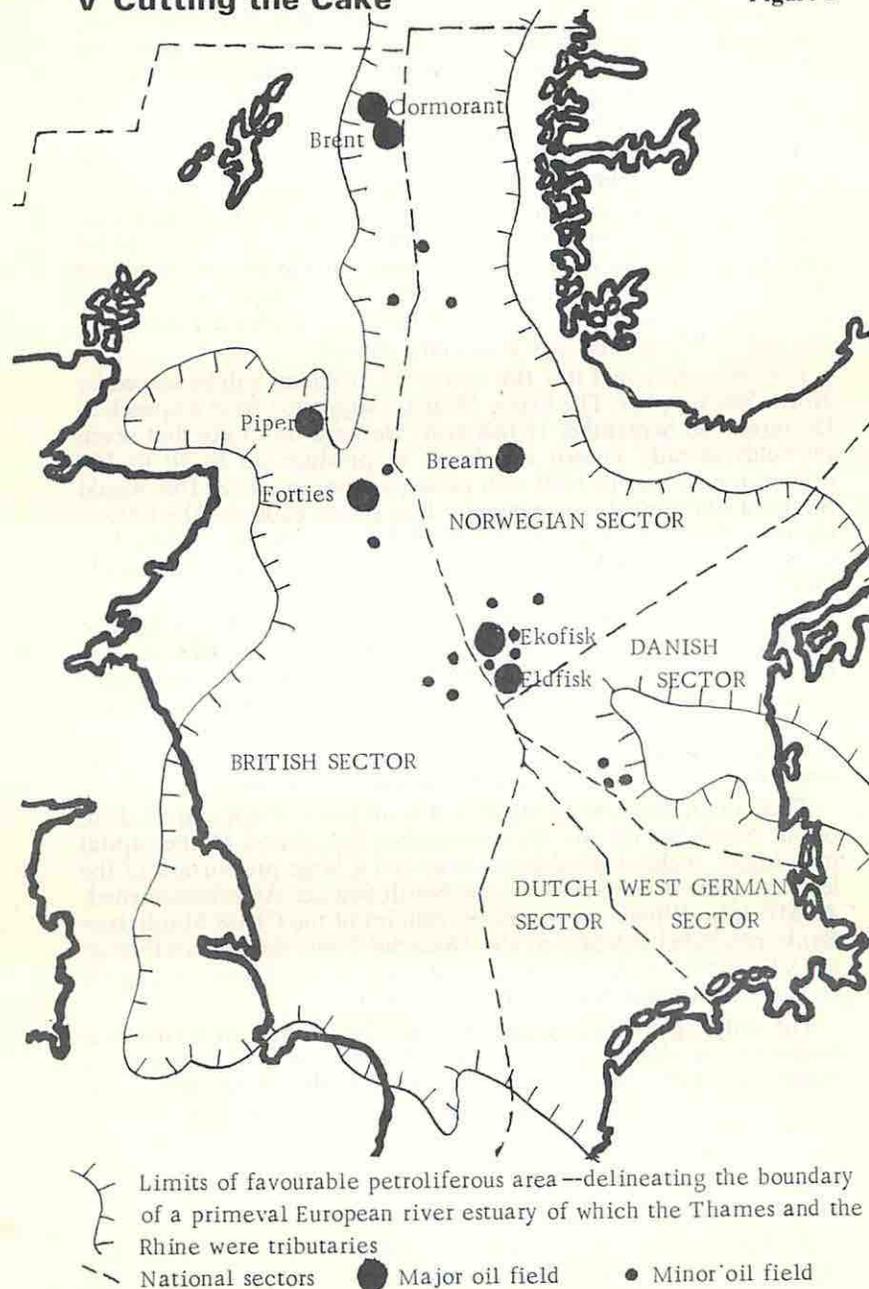
At a *Financial Times* conference on energy held earlier this month Dr. Warman said:

“We have gone through the phase of supplies expanding to meet demand. This phase lasted from 1859 until about 1969. We are now in the phase of the rate of increase of supplies failing to meet demand. This phase will last, in my opinion, until the late 1970s or early 1980s when world production will start its inevitable and slow decline. At the beginning of the final phase we shall be producing about twice what we are now. World oil production is currently 57 million barrels a day or 21 billion barrels per annum. The only published ultimate reserve figures of the North Sea put the possible potential recoverable reserves at around 40 billion barrels. In other words, to satisfy present consumption we require a new North Sea every two years. If demand/offtake continues their historical rise we will in 1983 consume the equivalent of a new North Sea every year”.

No other oil expert disputes Dr. Warman's general estimates. (“How Much Oil”, *Petroleum Press Service*, October, 1973).

## V Cutting the Cake

Figure 2



Now we have to look at who consumes the oil, where it comes from and how the crisis is likely to develop. It is certain that long before the physical peak of world production of oil is reached that political crises will develop. The cake is almost half eaten now, the slices being cut are getting bigger every year and, well within our lifetimes, only crumbs will remain.

The four big consuming blocs are Western Europe, the United States, Japan and the Soviet Union. I will deal with these in turn.

(a) *Western Europe* depends almost completely on Middle East and North African oil. This country, for example, depends on oil for over 40 per cent of its total energy needs at the present time and this is tending to rise to well over a 60 per cent dependency by the 1980s if economic growth continues and if the supplies are available. The rest of Western Europe is similarly placed.

It is frequently said that this country's problems will be solved by North Sea supplies. The Prime Minister suggested so at a speech at Dounreay on September 11 this year. He went on to say that seven oil fields already known will begin to produce up to 70 to 100 million tons a year in 1980 with perhaps more to come. This would be about our annual requirements. This is true enough. The following map shows the location of the oil fields in the North Sea. It is to be noted that only four of the seven major fields are actually located in our sector:

But there are others wanting a slice of our little cake. In Europe several spokesmen, including M. Henri Simonet, the EEC Energy Commissioner, have said that the North Sea oil and gas deposits must be shared out among all EEC nations. The French are already laying claim in Brussels to some of our gas. Either the EEC will collapse in bitter squabbles or there will be no more than about one fifth of the 100 million tons a year available to us.

Then again, the United States will want some, if not a great deal, of our North Sea oil. We must remember that almost all the capital investment, technological know-how and a large proportion of the leasing rights in our sector of the North Sea are American-owned. As Mr. John Winger, senior oil consultant of the Chase Manhattan Bank, reminded listeners at the *Financial Times* energy conference of 1972, the oil in the North Sea is going to be extracted as quickly as possible because America badly needs it.

The only legal requirement for "our" North Sea oil is that it is landed on our shores. Where it is finally marketed and consumed is entirely another matter. Taking the EEC and the United States into account, we shall be extremely lucky to end up with more than 10 per cent of our oil in the UK sector. Probably even this will replace equivalent or larger amounts of Middle East imports in the years to come, and not be additional. This country, North Sea supplies or not, is critically dependent on Middle East oil.

(b) *Japan* is even more dependent on Middle East oil—to the tune of 85 per cent and rising. Japan has almost no indigenous gas, coal

or oil resources and will be in a parlous condition before too long unless she maintains and increases her hold on the Middle East. This has become even more desperate lately as the Soviet Union has decreased the amount of oil that might be made available to Japan from Eastern Siberian sources in the 1980s.

(c) The *Soviet Union* appears to be largely self-sufficient. There are great deposits in Siberia with the likelihood of more on the Arctic North Shore. However, the Soviet economy is becoming increasingly "hooked" on oil, and dependency on oil will rise from the 55 per cent at present to over 75 per cent by 1980. The likely increase is so great, and the difficulties of extraction so formidable in the sub-zero vastnesses of Siberia, that the Soviet Union has already told her Iron Curtain partners that they must increasingly look to the Middle East for further supplies. Rumania has already taken the hint and is negotiating contracts. There are signs also that the Soviet Union herself will soon wish to import Iraqi and Iranian oil because demands are outstripping domestic production.

(d) The *United States* has almost completely exhausted her own stocks of cheap and readily available oil and gas resources. Even Alaskan oil, when available, will supply only about 6 per cent of her present requirements. The words of Mr. John G. McLean, president of Continental oil, in his annual report to shareholders in 1972, summarised the American situation as follows:

"By 1985 United States imports of Middle East oil will be about 750 million tons per annum despite major increases in U.S. coal production and also nuclear power output. By coincidence this quantity of oil represents the entire output of the Middle East at current rates of production. All of that oil is now going to Europe and Japan and their requirements are growing faster than ours! The odds are that the free world outside the United States will need at least *two more* Middle Easts by 1985. So, all together, we are going to need the equivalent of *three more* Middle Easts found, equipped and in production within the next fifteen years". (My emphasis)

But, as already stated, there are no more major reserves of the size of even one Middle East in the world, available to the United States (or Western Europe or Japan). The United States, by the 1980s, will need between half and the total Middle East production. President Nixon, on September 8 this year, has tried to camouflage the gravity of the situation by saying that there is no energy crisis in the United States. America, he said, will develop other energy sources within the next five years. The reality, however, is that the vast technological developments in open-cast coal mining, oil from oil shales and tar sands, nuclear and solar power stations simply cannot be done within that time scale. The United States will be a tough competitor in the Middle East from now onwards. The share of the EEC and Japan must inevitably decline considerably—and with it, our economies and our associated transport systems, particularly road.

## VI What Do the Owners Say?

All the above discussion has been without reference to the policies of the oil producing countries themselves. What do they say about it?

They have been saying a lot and doing a lot in the last few years. They have formed the Organisation of Petroleum Exporting Countries (OPEC) and are learning to speak and act in unison. They have also begun to nationalise Western owned oil companies in a big way, starting with the mid-1972 Iraqi takeover of the Iraq Petroleum Company and, more recently, those in Libya. It has certainly not ended and there will be many more to come.

These countries are aware, of course, that the three-way rivalry of the United States, Western Europe and Japan for their oil will undoubtedly leave them completely drained in a few years from now. Even Saudi Arabia, the largest single oil producing country in the world with something like two thirds of the entire Middle East oil fields, would, if she consented to American requests now being made, be completely drained well within 30 years. The other countries would be exhausted much sooner. In exchange for their oil the OPEC countries may very well have received many billions of dollars, pounds, yen, marks or francs into their coffers but may not want to risk depreciation of these currencies. They have already realised that by far their best bank balance consists of black wealth under the ground. Increasingly, therefore, the OPEC countries have begun to cut back oil production of late. Already this year Kuwait, Libya, Iraq and Bahrain have throttled back production by 3.4, 6.5, 2.9 and 8.1 per cents respectively. Saudi Arabia will certainly not entertain anywhere near current American demands and so the United States will require more from those countries which traditionally supply us.

In a recent interview in the *Petroleum Times* (June 29, 1973) Dr. Abderrahmane Khene, secretary-general of OPEC, said quite clearly that the OPEC countries intend reducing their exports in order to ride out the energy crisis. On September 20 this year Dr. Nadim Pachachi, the previous secretary-general of OPEC and, like Dr. Khene, one of the more restrained oil spokesmen of the Middle East, said the following:

“It is no longer possible to tolerate the present pattern of logic. Most of the Arab oil countries do not feel morally committed to expanding oil production beyond the capacities of their economies to absorb the revenues generated from such production. It has been stated that the Arab oil producing countries have a moral responsibility towards the consumers to raise their production above their economic and financial requirements in order to meet the growth in world demand for energy. Most Arab countries have no incentive to increase production indefinitely”.

It is most significant that, earlier this year, Senator William Fulbright, chairman of the U.S. Senate Foreign Relations Committee, and not noted for hysterical statements, said that the United States might be forced to adopt military measures in the Middle East in order to ensure future oil supplies.

## VII Conclusion

There can be no other reasonable conclusion than that it is highly likely that the amount of oil available to this country will significantly decline in the next few years. There is little possibility of there being sufficient oil products to power the traffic flows predicated by Document 1 of the Department of the Environment. I would therefore submit that all motorway construction should be curtailed forthwith. I ask you, Sir, to earnestly consider these arguments in your report to the Secretary of State.

**TAILPIECE**

After the submission, opportunity was allowed for cross-examination of Mr. J. A. Brooks, Group Engineer, Warwickshire County Council Sub Unit, Midland Road Construction Unit of the Department of the Environment.

In his answers, Mr Brooks agreed it was implicit in Government policy that "means of propulsion for road vehicles will be available into the foreseeable future" and also that national economic growth is assumed to continue steadily. In view of the fact that the British Road Federation's annual report for 1972 claims credit for the pace of the present road programme, he was asked whether the BRF had ever presented evidence at motorway enquiries in the Midlands. He and Mr. Burford (junior counsel) agreed that they had not, as far as they could remember. In reply to further questions Mr. Brooks said that the rate of return on investments in motorways was considered to be about 20 per cent in the first year and then declining somewhat so that they paid for themselves in 10 to 15 years. Nobody knows how long motorways will last but 100 years must be a minimum lifetime. Finally, no formal studies of fuel availability were being carried out by the DoE as far as he was aware but he believed that others were going on in the Department for Trade and Industry and in other centres.

After this, Mr. J. Burford, for the DoE, refused to bring rebuttal evidence. "These are national matters. They are not peculiar to this locality and they are not going to be dealt with by the Department of the Environment here and now".

The inspector commented: "I, like others present, recognise these questions as being very important. They are matters too far reaching for a local public enquiry to deal with satisfactorily". He would, however, see that the issues were reported to the Secretary of State.

One gained the impression from the mood of the enquiry on this day that the penny had dropped at last. During the final week of this enquiry the latest Arab-Israel conflict has broken out and concern is rising all over the world over Middle East oil supplies. There is, however, a great amount of professional inertia built into the present motorway programmes of the DoE. In order to avoid foolish public investments and environmental damage on a vast scale our case must continue to be vigorously at the many public enquiries being held over the next few months.

**KEITH HUDSON****PRESS RELEASE**

On a threat of legal action at the M40 Enquiry at Kenilworth, the Department of the Environment has now been forced to admit objectors' legal right to raise questions of local and national planning and transport policy. In spite of this, the DoE is now refusing to provide evidence of their research into these matters, and we are thus prevented from obtaining the evidence upon which an objection can be made. (The fact is, of course, that the DoE doesn't have a transport policy, but only a plan to build a motorway network, followed by a motorway network and then another motorway network.)

In the light of the new national factors, including food and fuel shortages which have emerged since the present proposals were planned in the mid 1960s, the Conservation Society, supported by the Transport Reform Group, Friends of the Earth, Transport 2000 and the Midland Motorways Action Committee on the 5 October asked the Inspector to adjourn the Enquiry so as to give the DoE time to produce this evidence.

His refusal even to consider this denies to objectors and the general public their right to be informed of the policies and data on which these motorways are based, and must increase public cynicism about the genuineness of these Enquiries and the reality of public participation.

Accordingly, as an expression of their contempt for this arbitrary action, the objectors left the Enquiry en masse to consider further action.

This has now become a national and constitutional issue to which the attention of the Lord Chancellor and both Houses of Parliament is being drawn.

**JOHN TYM**

for The National Transportation Working Party of the Conservation Society.

12 October 1973