

PRIME MINISTER

This memorandum deals with the principles of energy pricing (paragraphs 1-4) and the Department of Energy's suggestions in their memo (paragraph 5). This is for the meeting at 10.00 on Tuesday, 7 April 1981.

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6 April 1981

cc Mr. Hoskyns  
Mr. Wolfson  
Mr. Duguid  
Mr. Strauss  
Mr. Lankester

## MEMORANDUM ON THE PRICE OF ENERGY

### 1. Basic Principle

The main point is that the prices of energy should behave as they would do in a perfectly free, competitive environment. For a given supply of energy on the market the price should be such that that quantity is distributed to the people who most value it. The price of a given supply then is determined by demand. The rule of the energy authorities is to supply energy such that the supply price is equal to the demand price and equal in turn to the additional costs of getting the most expensive unit of energy to market.

The cost of supplying energy in 1981 includes not only the resources, such as labour and capital, used up; we must also take account of the fact that the quantity of energy available for future years will be thereby diminished. This can be thought of as simply a royalty payment for energy extraction today. That royalty payment will depend upon the expected future levels of energy and other prices and the expected costs of recovery.

### 2. Arguments for reducing energy prices

There is a valid argument that some forms of indigenous energy in the United Kingdom should be priced lower than those of our competitors. The most obvious case is where we have domestically produced energy sources and the energy is exported, such as in the case of North Sea Oil. Our energy price should be below the delivered price in foreign ports by the amount of the freight charge. But that is the only difference. If the price in the UK were below this level, then we should be denying ourselves the higher volume of resources which we will get by exporting that energy to foreigners and we shall be using it inefficiently in domestic consumption.

If per contra we have an energy source that is imported then there is, of course, no reason why the price for domestic users should in any way differ from the ordinary international market price with the freight elements added it.

/There are, of course,

There are, of course, more problems with an energy source that cannot conceivably, that is to say at any constellation of relative prices, be exported. Such may be the case with certain natural gas components. The principle, however, is that one should price the natural gas according to the extent to which it is substitutable for a traded energy source, such as oil. This amounts to very much the same thing as saying that, for a given supply of gas, the price should be such that it just clears the market - that is to say there is little or no interruption in supply. (There may of course be contracts where such interruption is negotiated.) Then the supply, and the rate of depletion of our gas reserves, should be determined in the same way as those for oil discussed above. The notional royalty payment should reflect the expected future prices and costs of energy. As before these are primarily determined by expected world market prices for energy sources, and I suppose one also should take into account the probabilities of political disruption, although in principle these should be also reflected in expected future market prices.

### 3. Invalid reasons for lowering energy prices in the UK

There is no reason at all, except that discussed above, why the energy price of an indigenous source should be less than that of an imported source of energy. In fact if the two sources are not perfect substitutes then there may very well be a good reason for keeping the price of domestic non renewable energy above that of the imported source. This will economise on domestic supplies and they can be regarded as the effective store against future expected political or natural events which may interrupt foreign supplies in the future. In other words there is an argument for having a somewhat lower rate of depletion than a simple calculation of economics might produce.

A second argument for keeping domestic prices low is to help in the fight against inflation. The contrary is true, it will exacerbate inflation. Inflation is brought about by the continuous pressure of monetary demand. This causes a continuous and persistent increase in the price level. A once and for all, "at a stroke"

/reduction in the price

reduction in the price level will in fact release more of the existing money demand to drive up the prices of goods other than oil and other energy goods. The effect is not only to transfer price increases to other goods but to reinforce them.

On an accounting level, it is clear that the reduction of energy prices, insofar as they are publicly produced, will give rise to an increase in the public sector borrowing requirement. This gives rise to the usual problems: it will have to be financed either by borrowing long dated gilts, so driving up interest rates, or by increasing the money supply. This is, of course, the normal source of inflationary pressure.

#### 4. Advantage in foreign trade

It is often argued that our competitors, the French, the Germans and particularly the Americans, subsidise the use of energy in industry. If we do not do so our industry will be disadvantaged relative to the industries of our competitors. We shall lose markets and this will generate unemployment, falling on the PSBR, and so generate inflation. Again this argument is erroneous. If the Americans subsidise the energy industries then necessarily they are taking money from other low energy industries in order to provide the subsidies. Their energy intensive industries will expand too much at the expense of the energy efficient industries. If America wishes to supply Britain with energy, congealed in energy intensive goods, at lower prices than the international market price, then we should indeed welcome it and we should adapt our industry accordingly. (I am assuming that this is not a short term operation merely to damage our industry and for the Americans to get markets, after which they will put up the price of their products.) It seems impossible to complain of being allowed to buy energy intensive goods at below market price. Furthermore if, as everyone argues, the price of energy in real terms is going to continue to increase then our industry, adjusted to a low energy intensive profile, is likely to be in a much better position in the future than those over-expanded energy intensive industries in the United States etc. Indeed it might be argued from this that there is some case for imposing a tax on energy over and above its international price. I would, however, argue against this because I believe that the free market is probably a much better judge of

/future energy prices

future energy prices than anyone else. The best way to "help industry" is to maintain monetary stability, reduce the PSBR and the level of interest rates. This will not discriminate in favour of energy intensive industries and will provide a healthy basis for expansion of an energy-efficient economy. It is probably true that energy intensive industry will give a very small increase in employment per £1million subsidy whereas other industries will generate many more jobs.

5. The Department of Energy suggestions

a. Budget Assistance

i. HFO

The argument that HFO should be remitted but only for a select group of heavy users (paper, chemicals, textiles, etc) is highly discriminatory and favours large firms with energy intensive processes. If we can get away with 30% on the Frigg contract, then it would be better to spread the benefit equally over all HFO users (I do not know the legal constraints here.)

ii. 3/4 pence off the 20p tax increase on DERV

This is among the more attractive of the proposals. It avoids discrimination against small business, and generally reduces the costs of the highly competitive road haulage trade. Road haulage is an input into virtually all industries, especially building and contracting. A tax increase of 16 or 17 pence will be still greater than valorisation.

b. Non Budget proposals

iii. Lower electricity prices to selected bulk users

This seems to be the worst of the Department of Energy's suggestions. The evaluation of fuel prices at the present low DM and high sterling may mean that the margin is quite transitory and could disappear in a few weeks or months. It is not clear whether the relatively high electricity prices to customers with super-loads etc are due to fears of undue preference in the UK or to subsidies on the continent.

/If the continent

If the continent supplies this bulk electricity at a discount below short run marginal cost, then there is no reason why we should make the same mistake. If, however, Swedish or Norwegian hydro electricity is low cost, must be consumed near source and so is cheap relative to fossil electricity, then it is best not to subsidise our paper or glass industries to match their energy costs.\*

A good case for reducing tariffs exists <sup>if</sup> electricity to bulk users is priced well above short run marginal costs. It may well be that the fear of charges of "undue preference" prevents the esi from reducing tariffs to retain demand. Then there should be room for negotiation - rather like that practised by the NCB with its large customers - to ensure mutually profitable deals. (The present prices may be too high if there is considerable excess capacity, and, as normally planned, the tariffs are designed to cover the amortized capital costs of the generating and distribution plant.) This needs to be probed. But this should not be allowed to increase the PSBR. It will give flexibility to save demand which would otherwise disappear - but still they will contribute a profit to the esi.

iv. Foundry Coke (NSF Ltd.)

The problem here is the over-capacity of the continuous process - it is now working at about 50% of capacity. Loading the long run marginal costs on this low throughput have given the NSF high costs which cannot be cross subsidised. This is quite a small item (about ½million tonnes) with transitory problems with respect to the ECSC subsidy. The Department of Energy does suggest an appropriate policy. The fault is the over-capacity (as in BSC) and the price must be internationally competitive. The losses ought to be written off.

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\*This does not mean that the industries will necessarily locate in Scandinavia - Japan, for example, imports timber from Oregon and exports plywood to California, because she is very efficient.

c. Gas

I agree with the Department of Energy.

d. General

The exchange rates play an enormous role in these relative prices. Any subsidy ought to be conditional upon exchange rate movements. A formular could be derived which made the subsidy vary with the appropriate basket of exchange rates.

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