

A brief history of the energy crisis: chaos, trial and much error – The Article 29.03.22

As we become enveloped in one of the worst energy crises in memory, with rocketing prices and rising doubts about basic national energy security or reliability, a chorus of advice keeps coming forward from expert quarters.

Speed up and hasten our riddance of fossil fuels and all will be well as we move into a happily decarbonised future.

Obvious as it sounds this could actually be the worst possible course now to take. Whether the priority is seen as cost-of-living relief, or climate control and energy transformation, or the safety of primary energy supplies, the nation's lifeblood, against Ukraine-type disruption, or all of these aims together, the last thing we need now is more rush and haste towards the promised land of low carbon.

Why? Because between here and that happy future lie rapids of the most dangerous kind, requiring careful, skilled and knowledgeable navigation of every energy market and supply line at every stage. Lose the balance and we lose everything. The future becomes, not a calmer, greener and safer one, but a mounting sequence of crises, spreading from inflation to economic collapse and instability, with huge suffering along the way.

Already our boat is being violently rocked as the current pulls us faster towards the rocks. Panic is not far below the surface, and not just because of the most recent impact from the Ukrainian horror, with the looming prospect of Russian oil and gas being cut off. Energy prices were already impossibly high, long before that.

We knew long ago that these immediate dangers were coming and that the UK energy and power supply system was dangerously vulnerable. Post-Covid world recovery was bound to mean soaring demand and tight energy supplies. Chinese leaders were exhorting their companies to buy up LNG supplies "whatever the price" months ago. Add in the UK's reckless lack of diversity and back-up in fuel and power supplies, with gas-burning for electricity being allowed to grow perilously large (now 45-50%); and add in the miserable lack of gas storage facilities — and the scene was perfectly set for vertical price take-off if anything, anywhere, in the complex pattern of primary energy supply ever went wrong.

And wrong it certainly went. The wind stopped blowing in the North Sea, as it always does from time to time. LNG ships were turned in mid-voyage to the highest bidders in Asia, with global gas market spot prices going crazy and sending gas import prices through the roof, wherever they came from.

Meanwhile the other big back-up resource, low-carbon nuclear electricity, that might have been a fallback, had been allowed to run right down. Coal stations were closed anyway, amidst a chorus of nodding approval, while UK oil companies were being told by their investors to invest no more, thus passing the oil market ball straight back to OPEC — with memories of 20th-century oil shocks forgotten.

In something as complex and sensitive as a modern power grid, these disruptions will always happen. There has to be diversity of sources and a robust system of alternatives and back-ups at all times. Whatever the primary power source, fossil or renewable, we are moving fast into an all-electric world. The estimate is that by 2050 the world will be requiring twelve times the electric power now being generated. However much demand growth is assuaged by declining oil intensity (more output per barrel), increased efficiency and insulation, conservation or more localised sources, this is the inevitable and unavoidable trend.

Meanwhile, the immediate dangers have to be addressed immediately, otherwise there will be no decarbonised tomorrow and plenty more of the present crisis. What therefore to do?

For a start, world oil supplies can be swiftly opened up, much more swiftly than governments admit, or in some cases want to admit. The Saudis have at least two million barrels a day of spare capacity, with more on the way. Their Gulf neighbours have another million at least.

To his credit the Prime Minister spotted this and flew to Riyadh to present the picture to Saudi leaders, accompanied by much indignation and bad-mouthing from ill-wishers. With the Chinese also pushing the same way, at least on this issue, and Saudi-Arabia being one of their main sources, oil prices could fall quite soon, dealing at least with the soaring price at the pumps, and its ugly inflationary knock-ons.

Further oil price easing will come as the dithering American energy policy-makers, who have tied themselves in knots trying to steer between short-term need and long-term priorities, give a fresh go-ahead to US shale oil (and shale gas) production and export. This should take it back to the 12 million barrels per day output levels of a few years ago.

Ironically this means that, amongst the outcry to “do something” on the rocketing cost-of-living, the Chancellor’s decision to cut fuel duties, could prove the least well-timed and the least necessary.

Gas, with its sevenfold price increase, is trickier, and made even more so by UK energy policy makers allowing gas to take far too large a place in both power supplies, as described above. Forty years ago, burning gas provided just 1% of UK electric power. Expansion was justified, but the 45% share now is madness. Our own North Sea gas decline can be slowed, many more secure LNG contracts tied up, including some from the American shale sector, and gas burning for electricity immediately reduced. Meanwhile, the life of some of our ageing nuclear stations can be further extended, all as immediate emergency reliefs in face of the present disastrous situation.

Longer term, of course, the whole nuclear power scene needs rescuing from the bogged down and confused state into which it has been disgracefully allowed to drift. I wrote recently about this problem for The Article here.

A bold plan in 1979 to launch a new generation of nuclear plants (Nine PWRs, announced by this author to Parliament in October of that year), and looking twenty or thirty years ahead, was frittered away in classic short-termism, with only one being built at Sizewell B in Suffolk — and that taking fifteen years to start operating. Had construction of the other eight been started over the succeeding decades, the UK energy scene would look very much less vulnerable, and very much cleaner, today.

Soon Sizewell B will be the only one of the old nuclear fleet left operating, hopefully to be joined in 2027 by just one giant new one at Hinkley Point, courtesy of French and Chinese developers, and with British taxpayers and consumers providing heavy support. As with all previous projects elsewhere of this type, budget overruns and time delays abound.

A surge of Government enthusiasm for more new reactors comes much too late to help overcome the present dangers, and anyway seems focussed on repeating all the problems, technical and political, of past large-scale projects of this type. Smaller, safer and faster-constructed nuclear reactor models are probably the answer, with more mammoth large-scale designs now out of date. But at least the key place of low carbon, reliable nuclear power is now being recognised once again in the future energy system.

Closing down the fossil fuel age involves the most massive shift in the entire structure of the world economy, and its surrounding social and political frame, since the Industrial Revolution. Correction — a much bigger shift even than that. From every angle the challenges which could upset the entire world balance come crowding in. Potential winners and losers, amongst workers, amongst communities, amongst regions, amongst nations, abound. The situation cannot be managed in haste. And the attempt to do so will guarantee its failure, the debilitating repetition of crisis and the ugliest of consequences.

Meanwhile, the energy quagmire into which we are fast sinking is closely connected to the looming climate crisis. Everyone sort of knows that, but the understanding of how the two aspects relate seem to have gone missing. The whole decarbonising campaign now needs major reinforcement to have any real impact on planet warming at all. Regardless of all COP 26 and NetZero ambitions and visions, world emissions are rising fast and will go on rising, whereas Paris targets require not just a levelling off but a substantial annual fall.

Reluctantly aware of this simple inevitability, the talk in leading green circles has turned from merely battling to cut emissions to a new front. Somehow, the billions of tonnes of carbon being puffed each day from eight to nine thousand coal-fired stations across Asia, Africa and the Americas — which are driving emission volumes ever upwards — must be checked.

But even then the actions are going to fall far short of halting the growth of greenhouse gases. Beyond carbon capture a whole new low carbon campaign has to open up, with not merely capture but direct carbon recovery and absorption contemplated on a much bigger scale than anything hitherto attempted. Such plans, based on a multiple range of climate recovery sites across the planet, are beginning to circulate in scientific and business circles, as the full and ugly reality of the inadequacy of present carbon policies sinks in.

All this adds yet another layer of challenges through which our nation has to be piloted to stay on course and on track. The seeds of the present conflux of energy-related crises in the UK were scattered, and allowed neglectfully and ignorantly to grow, many decades ago, and long before carbon began to get centre attention.

Now, having slipped and slithered into the present fiasco, the choices are very limited — indeed, almost non-existent, except for very short-term and largely ineffective palliatives. A steady hand and a deep understanding of the real sources of our troubles can help us through the immediate deep dangers. Bottom of the advice list, or not on the list at all, should be to hurry and plunge on regardless towards fossil fuel elimination, losing all balance in energy policy and succumbing to even deeper dangers ahead than the ones now upon us.

Pray that our pilots and guides, policy-makers and advisers, have the skill, the depth of understanding and the strength to reject beguiling and nonsensical advice, plus the ability to explain to a now frightened public the realities and essential steps to see us through. Pray hard.

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