

VIEW FROM ABROAD

MESSAGE TO THE UK: TEAR UP YOUR OLD ENERGY POLICY AND START OVER WITH THE NEW REALITIES OF NATURAL GAS



Robert A. Hefner III, author of *The Grand Energy Transition*, gives Energy Focus his opinion on UK shale gas

The current direction of energy policy in the UK, in my opinion, is not wholly in the interest of the British people, their environment, or the global challenge of climate change. I say this because a responsible energy policy must have two simultaneous goals: to improve the general environment and, equally important, foster economic growth, not inhibit it, particularly in challenging economic times. Energy policy must not only be environmentally sustainable, but, for long-term success, must also be fiscally and economically sustainable.

Energy use within the economy is as fundamental as money, yet this fact seems to be universally overlooked. There can be no

production or consumption of goods and services without the use, or, as I like to say, the expenditure of energy. Civilisation as we know it requires the use of vast quantities of reliable, uninterrupted energy, and the sources of that energy and their qualities, such as efficiency, by-products, costs, as well as external costs and benefits act as either an accelerator or brake on economic growth and productivity. Therefore, energy sources and their infrastructure that are less efficient and more costly, and by more costly, externalities must be included, will subtract from economic growth during the entire life of their use.

With these fundamental energy, economic and environmental

facts in mind, we can see that energy sources that require either mandates or subsidies must be examined closely to confirm that the long-term tax on the people and economic growth are responsible within the economic and environmental times in which they are forced into the energy system by their mandates and subsidies. A responsible energy policy must look at all the possibilities and perform a thorough and pragmatic cost/benefit analysis before its adoption. Once an energy source and its infrastructure is in place, it will be with us the 30-50 years of its lifetime. So, if that energy system is less efficient, more costly, or both, than alternatives, one must recognize that it will be an effective brake on economic

growth during its lifetime. What is needed now is stimulus to growth, not a brake. This is why a responsible energy policy should be an energy policy that facilitates the continuing growth of the most efficient, relatively low cost (including all external costs) energy source that also brings an enhanced environment.

In my opinion, the current UK focus on a great leap into the middle of the 21st Century, with "green alternatives" as the nation's primary energy sources that are not yet sufficiently efficient or economic not to require subsidies and mandates, particularly wind and solar, is not a responsible path forward. It not only locks in more costly and less efficient energy sources for the best part of a generation, but such a policy is not the best way to fight global climate change. America is a great example; the use of its domestic natural gas to displace coal has proven in recent years to be by far the most effective way to reduce CO₂ emissions on a large scale. Over the past six years the US has become the most successful nation in the world in reducing CO₂ emissions by its displacement of coal with natural gas. And, although the U.S. never ratified the Kyoto Protocol, it has the best record over the past six years of reducing CO₂ emissions to Kyoto targets than any nation that ratified the Protocol, including the UK.

Although I am not an expert on the details of the UK shale geology, the geology of natural

gas has been my life's work. With that as my background, and what I do know about the general geology of the UK, I believe one should expect large quantities of commercial shale gas that can certainly be developed with minimal environmental costs. Therefore, it is my strong opinion that by far the most responsible energy path for the UK is the continued and expanded use of natural gas, rather than taxing the British people billions of pounds more for subsidies and locking in long-term higher electric prices in order to force feed non-commercial wind and solar into the system. Wind and solar certainly have their place, and I believe will grow significantly over the coming decades as they eventually become cost competitive, but, pragmatically, they are niche energy technologies and the already spent and committed subsidies have acted to fill their niche quantities in their most efficient locations. This is not a time to leapfrog forward, but a time to evaluate thoroughly the overall effectiveness and cost benefit analysis of the existing wind and solar facilities (which also require subsidised back-up facilities) before new and extended subsidies are considered. My bet is that if such a study is performed academically without prejudice, such subsidies and mandates will be abandoned.

Nuclear, is a special case. I must say it seems rather silly to me to force British consumers to guarantee payments for electricity that could cost two

times as much as the current cost per kilowatt hour, so the French can build a multi-billion dollar nuclear plant that won't be ready until 2021, and with highly likely significant cost overruns, lock-in British consumers to much costlier electric rates for 50 years thereafter. Particularly because natural gas generation facilities can be built for one-fourth the cost in half the time and because of the fact that the global abundance of shale gas and its development will continue to bring down global natural gas prices, including imported natural gas (LNG) for several decades. In the coming years, natural gas will be the cheapest, environmentally friendly source of energy and its global abundance is now assured. Additionally, it is important to recognize that the period of exponential growth in innovation for natural gas technologies, particularly on the consumption side, has only just begun and will certainly, rapidly bring declining costs to the consumer.

My recommendation to those who are charged with formulating a new energy bill in the UK is to tear up everything that has been done so far and start over. Begin anew by taking account of the points I have made in this article and studying them thoroughly and without bias for yourselves. By doing so, I am confident that the new Energy Bill will be built upon the principal use of natural gas, and the result will be a wholly responsible outcome for the British people.