

To whom it may concern.

The whole issue of 'low carbon' has troubled me for some time, as most of it is based on political dogma rather than science. Due to lack of time I'll try to be brief.

The drive towards electric (and compressed air) cars is scientifically flawed. I used to work for the MOD on vehicle transmission efficiency, so know a bit about this. (Hydrostatic transmissions we developed were 30% efficiency, versus 98% for a gearbox.)

Let's take some examples:

Normal car: diesel engine approx 35% efficient, trans 95% efficient – therefore overall efficiency (miles / energy used) = $35 \times 95\% = c. 33\%$

Electric car: (these figures are approximations as can vary quite a bit) - diesel engine (in power station) 40% (steam turbine would be nearer 15%)

Driving alternator, 90%. Transmission through power lines & transformed to 240v, 90%.

Charging battery, 85%. Electric motor discharging battery to drive wheels, 85%.

So we get $40\% \times 90\% \times 90\% \times 85\% \times 85\% = 23\%$.

So we see an electric car uses far more fuel / mile than a conventional one.

Compressed air as motive power. Didn't know there were cars using this until Rob Duhamel mentioned it. Far more difficult to estimate, but here's an example: an average hand-held sander uses approx 350 Watts. A comparable compressed air-powered sander requires a compressor of approx 3hp (2,000Watts) to keep up. Efficiency? Around 17%.

So what are we trying to do here?

The global warming / climate change is blamed on humans adding 1% of CO² to the earth's total. One might ask what the other 99% is doing, but let's look at the facts. The IPCC (who promote the anthropogenic global warming case) is not a scientific organisation, but a government quango (it's in the title). They have been proven to manipulate figures and computer models to suit their case. On the other hand, tens of thousands (you read that right) of scientists have disassociated themselves from that theory.

It is a fact the sun had a variable output and that the earth's magnetic field shields earth from most of the sun's radiation. It is also a fact the earth's magnetic poles have shifted substantially in the last few decades – and that its field has reduced considerably in that time (scientists believe that a switching of the poles is imminent).

It is also a fact that science has discovered, by sampling ice cores, that as the earth has fluctuated between ice ages and warm periods over the millennia, that a rise in CO² always follows warming (so cannot be the cause).

Strange, then, how the above scientific issues are ignored in favour of a theory without scientific basis. Even the theory that CO² is a 'greenhouse' gas is unproven.

The above means that CO² is not the cause of our present climate change and therefore all the drive towards low-carbon energy has no scientific basis.

What is happening, though, is that by moving towards electric and other means of storing and transporting energy, we are actually using more fuel than we might otherwise be doing.

So in fact we are actually making matters worse, by using up finite resources (oil, gas, coal etc) than we would otherwise have done.

So-called environmentalists have a lot to answer for.

I have already covered harnessing wind power in another forum – suffice to say the benefits claimed are imaginary and politically driven.

Tidal and hydro-electric power is a different kettle of fish – but for some odd reason seem to be virtually ignored in the environmental debate.

In the above I have tried to be brief. I have, for example, not discussed nuclear power in my electric vehicle analysis. Sadly, most people seem to think this is power from nothing, with no consequences. That is erroneous. Look at Chernobyl and 3 Mile Island. Look at the problems dumping nuclear waste – which remains lethal for tens of thousands of years. Consider, also, that nuclear fuel, like oil etc, is finite. Some years ago it was estimated we had 1,000yrs before supply ran out. (Incidentally, it has also been estimated there's 1,000yrs worth of coal in the earth).

In conclusion, most of the present 'save the planet' environmental strategies are, by being based on politics and ignorance instead of science, actually making matters worse.

We do not have to follow the herd. Let's set an example by using science and commonsense.

G. Baudains