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Fact: the world does need to transition to another form of energy / Our societal complexity and conflicting demands / But do we have the financial resources? / Putting off the evil day

Many web sites show numerous people have bought into three mantras:

1. Global warming is caused by our use of fossil fuels.
2. That we therefore need to transition to renewable energy.
3. That it is inevitable that we will transition into electric cars.

Yet global warming occurred when there were dramatically fewer of us in the world and the only fuels we burnt were a bit of wood and occasionally a little coal. But having said that, we have moved from 240 million people in the year AD1, when we and our livestock comprised 5-7% of all land mammals, to 7.5 billion today, when we and our livestock comprise more than 97% of the land mammals. We are dominating and re-shaping our world to deplete all resources. So moving to renewable energy makes sense...if we can achieve it. As Dr Birol of the IEA says, "We must leave oil before oil leaves us." The same is true of all resources, whether fossil fuels, top soil, fresh water aquifers or key minerals.

Fact: the world does need to transition to another form of energy

I agree with the second point above. Today, in his 90's, Prof Freeman Dyson will happily tell anyone who will listen that the objective to provide for a transition from oil, was their intention when they first started developing nuclear power stations in 1948. But nukes fell out of favour because of the downside of the failings of industrial designs of places like Chernobyl, Three-Mile Island and Fukushima' Daiichi.

Today's scientists have the same missionary zeal that the nuclear scientists had in post war years (WWII). They have the same hubris and ambitions. Meantime human greed for "more" has developed exponentially and spread to places like China and India where everyone aspires to the living standards of Britain, the EU, Scandinavia, Australasia and the USA had in the 1940s and 50s. The other difference is that when I was born in 1947 there were only 2.5 billion of us.

Our societal complexity and conflicting demands

Today there are more scientists alive that have ever lived in human history. Auckland City today probably has more "resource planners" than the USA had when I was born. Our societal complexity and the conflicting demands that have arisen to pander to our democratic ideals means that the cost of societal complexity now threatens our existence. This is pretty much what did the fatal damage for most earlier civilisations.

The only constant in this modern era is that change occurs and is necessary. Demonstrably we are moving into a time when technological enablers for one area of applied science, are able to be quickly spotted and adapted to other areas. So stuff like artificial intelligence, self driving cars and innovation in numerous areas are accelerating.

But it is by no means inevitable that we will transition into renewable energies like solar and wind, if only because solar panels don't last long (say 20 years) and wind generators also require maintenance and replacement parts. It is oil that is necessary for the roll-out of all these. Energy storage technologies are in their infancy, despite the tales of progress that come along. Without energy storage, both wind and solar are intermittent. Electric cars require energy storage and the modern batteries do not last long enough to be an enduring solution.

Agricultural productivity is no longer reliant on top soils, but on natural gas based fertilisers. So now we have a reliance on a fossil fuel for that too – ushering in the era of monoculture where soils get thinner and thinner.

This article shows how we should moderate our expectations...

<http://richardheinberg.com/museletter-286-100-renewable-energy-what-we-can-do-in-10-years>

But do we have the financial resources?

But do we have the financial resources to make such a huge change as would be required to transition from fossil fuels to renewable energies?

The answer is clearly NO - or at least, not nearly as fast as an orderly transition would require.

Certainly in places like Scandinavia, Switzerland, the EU, and Japan.... all with negative interest rates and therefore lacking any chance of a return to normalcy. This article by Oliver Hartwich spells it out... we are headed for systemic failure in many places....

http://www.businessspectator.com.au/article/2016/3/17/economy/ecb-dead-end?utm_source=exact&utm_medium=email&utm_content=1895447&utm_campaign=kbg&modapt=

By lending at low rates and charging banks that need to hold cash, the ECB will cause mayhem as they rob from the rich to give to the poor. Suddenly, what they are doing will prove to not be reversible and the financial crash will come.

The cause of all our woes since 2000, has been the deterioration in EROEI for all forms of energy and the exponentially rising cost of extracting all the resources that support our civilisation.

Putting off the evil day

In the USA where a presidential election prohibits bad news, the US Federal Reserve today backed away from an expected interest rate rise – putting off the evil day of a rise until “next time” - if ever. That was dove-ish enough to lead to higher share prices. But it may have been due to retail sales in the USA, which were revised down for January, from an increase over last

year, to a decrease...and added to that sales for February came in lower too. Meantime there are more delinquent auto loans now than there were in 2009.

Chinese debts are slowing their economy and their unemployment is about to take some huge hits....

<http://davidstockmanscontracorn.com/the-china-boom-grinds-ever-slower-januaryfebruary-data-update/>

If there is one country that uses half of the world's minerals and resources, the way China does, and then they drop their ordering quantities, not only prices but also volumes of sales take a hit. The global economy cannot possibly grow under those circumstances, other than by sleight of hand – using credit expansion, money printing and rapidly reducing interest rates to goose higher the monetary measure of GDP. The coal industry, the target of global warming campaigners is unlikely to recover...taking with it a large slice of companies and funding credibility...

<http://www.telegraph.co.uk/business/2016/03/16/world-coal-giant-peabody-faces-bankruptcy-as-industry-implodes/>

The drop in prices for commodities which should be net good for consumer demand are easily analysed – as this article shows...

<http://www.bbc.com/news/business-35761021>

But the general freight is also down as noted by the largest carrier of them all, Maersk...down 8% YOY. So folks already bought what they wanted and are now saving for a rainy day...and that is one sure way of making the rainy day happen.