

Thumbing the cutting edge of folly

Angus Leslie Melville

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Ain't it curious that the – some would say – staid and predictable world of infrastructure and energy can, on occasion, feel a bit too science fiction for its own good?

In recent years, it has often felt that the industry is trying to go Blade Runner when all we want is a few more project finance motorways, possibly a wind farm or 2, a desal plant where the rain don't fall, maybe even a cheeky PPP hospital to serve the unhealthy masses.

You get the picture? Stuff we all understand and are comfortable with. The sort of projects that lenders label "the right sort of deal" followed by eager use of "cookie cutter" and "vanilla" (sometimes curiously in a negative sense).

That's the sort of stuff we should be doing. Yet it seems we are being dragged down a hi-tech path to our likely doom – in some cases, guaranteed penury.

In a world where we largely want good old fashioned wrist watches, we're only being offered smartwatches that have the bad grace to confirm your blood pressure tablets aren't working as promised.



Having this week staged IJGlobal's REFF Europe in Amsterdam, technology has been dragged to the forefront of my mind as the weird and wonderful of yesteryear is wheeled out as mundane and workaday.

This is something that's been making me a trifle antsy as people talk – without smiling – about infra/energy solutions that are right on the edge of reason and deliverability.

At the start of this year, I used this column to raise a concern – one that is not shared by the majority of the industry – that in the medium term there will be a bunch of <u>stranded assets</u> across the renewable energy sector.

Now this was floated past a hefty number of people whose opinion I respect... but I don't agree with them. Their response was that the need to increase energy generation over the coming years will see such assets OK – no matter how remote, small or technologically defunct they are / become.

I fear that evolving technology (solar in particular) and the proliferation of alternative energy generation assets will in 5 years' time (maybe a little more) result in a slew of stranded assets.

To my delight, this concern was repeated by a highly-respected renewables figure in Amsterdam when talking about battery energy storage systems (BESS) – prompting today's editorial.

Curiously, his view was side-stepped and largely pooh-poohed as delegates were of the opinion that they would be just fine. This is a fair point when such assets are underpinned by appropriate agreements, but I sense trouble brewing.

On a broader footing, it does rather make one stop to ponder the technologies that are being touted as the panacea to all our energy (and infra) woes as the scramble to achieve energy security continues at a pace that can only be matched by a runaway train.

Let's take nuclear fusion as a starting point. The more I see posted on LinkedIn about miniscule breakthroughs, the more I am put in mind of Queen Gertrude intoning that they "doth protest too much, methinks".

As one engineering source says: "Sadly, I don't expect that within my lifetime. We aren't even at the Manhattan Project stage yet with the viability of the science, let alone having a lab-scale technology to be engineered."

But fusion is at the funky end of the scale. Let's bring this back to the here-and-now and focus on hydrogen which everyone seems to be getting a little over-comfortable with.

In mid-March the EU launched the European Hydrogen Bank (EHB) sending (to my mind) a signal that it has achieved core status. Later this year, the EU will also be holding a pilot auction for subsidised green hydrogen contracts.

While hydrogen has many applications that work, the belief that its wider proliferation will shortly reach a point where we are using it to cook sausages and fuel cars is a tad optimistic / unrealistic.

As one banking source says: "Hydrogen for home heating is fantasy rather than science fiction. It's still amazing how many people take gas industry puff pieces on this as fact and include them in credit or investment cases."

And then you have carbon capture and storage (CCS) – even carbon capture, utilisation and storage (CCUS) – which one chum reckons will ultimately "end up being a big nothingburger".

The industry source adds: "My sense is one will end up leaking because it is a flawed technology and a huge distraction / red herring... but one where the idea of it is immensely popular because it allows polluters to delay changing behaviour because they – ostensibly – believe the CO2 can be 'dealt with'."

There are so many cockamamie solutions being bandied about today that – really folk – there needs to be a bit more digging in the ribs and open (possibly even ribald) laughter when they are wheeled out.

I mean - come along. What are some of you folk smoking?

Do you remember from a couple of years back in Switzerland the company Energy Vault that made a battery out of concrete blocks? The SPAC – Novus Capital Corporation II – announced early in 2022 its combination with Energy Vault.

In a world where KISS – keep it simple stupid – should be a byword... they took it to a new level by raising blocks of concrete and lowering them to create energy through some (doubtless) terribly clever / simple gearing mechanism.

And then you have kite energy that would bring a smile to the lips of Mary Poppins.

British start-up Kite Power Systems (KPS) received a thumbs up from Bill Gates along with a joint £5 million investment from 3 energy firms in 2016 (one of them was Shell) for technology it believes could collectively generate hundreds of MWs by 2030.

Much like the concrete block solution, the tech is simple. Kites are tethered to a spool and the wind pulls them to create energy as they perform figures of 8... which all sounds rather splendid and not at all dangerous in the slightest.

I mean – good grief – can we all please step off the rollercoaster?

We know what works. We know what the lending community is comfortable with. We all know what the investment community will get behind. And it's not the sort of solution that leans closer to Frankenstein than Edison.

Let's leave the blue-sky-thinking to the idiot savants or we will all start gibbering about driverless cars, hyperloop or Stretto di Messina.

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