

# 2022 – the great energy coin flip

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14/01/2022

Have you noticed that journalists at this time of year have a nasty habit of churning out stories that are the equivalent of sticking a sucked finger in the air to test which way the wind prevails?

It's a bit of a cheat really. It's journalistic low-hanging fruit... a bit like entering a deal at syndication.

With that in mind, it was with the sense that a shower would shortly be required that I fielded a question in the new year round-robin of phone calls – this one with an old banker chum – that centred on what the theme would be for 2022.

It was this call that prompts today's Friday Editorial, which is best enjoyed with a side portion of low-hung fruit.

In this call, we agreed that the most interesting developments for 2022 would be in the energy space. As the conversation evolved, this was whittled down to nuclear, hydrogen and wave power. There was also mention of battery storage, CCS, CCUS and a few other bits and pieces... but this trio dominated.



It's all about energy generation, really... and the more unproven the technology, the better – it would appear.

Over the coming 12 months talking heads – you know who they are – will blab on relentlessly about plans for nuclear (kicking the can down the road), joint ventures in hydrogen (oh so many JVs), and pilot projects in tidal energy (time to scale up).

So, with that in mind, let's get 2022 off to a flying start with an editorial plucked from the very lowest branch of the news tree.

## Nuclear – base load crowd divider

Taking a look at what's been written on nuclear by the *IJGlobal* news team in the first couple of weeks, a swift search of the site at Thursday lunchtime reveals a couple of stories published.

The first one focuses on the RWE [decommission of 4 plants](#) in Germany, taking a total of 2.2GW of nuclear capacity off the grid... which isn't exactly getting us off to a good start, but does warrant a snort of derision as Deutschland leans ever more heavily on coal.

The other is in the UK and focuses on the House of Commons voting in favour of the [Nuclear Energy Financing Bill](#) to provide a new financial support model for nuclear power infrastructure... because that's been working so well to date.

Well, that's a bit of a curate's egg of coverage, but at *IJGlobal* we tend to be wary of writing about nuclear as it's a rabbit hole you can disappear down, never to return... all the while offshore wind farms are closing faster than you can scream

tsunami.

But when it comes to nuclear, the chatter is dominated by small modular reactors (SMR) which will be wheeled out repeatedly as examples of what “should be done” over the coming year.

The problem IJ has with SMRs and the whole nuclear question centres on the limited role private finance will play – should they ever make it off the drawing board – and puts us off writing about them beyond noting policy developments.

The bottom line is that we’d all rather hear where a new offshore wind farm is planned or identifying lenders on the next identikit solar park – you know, the daily bread-and-butter of the infrastructure community rather than a huge nuclear power plant that will take a couple of decades to approve, never mind build.

But it will be discussed until mouths dry – so now’s the time to work on your “resting agreement face” for conferences while some nuclear bod waxes lyrical about reliability and base load, proselytizing a proven technology that answers all your energy needs for the foreseeable...

Yeah – whatevs.

If it’s an in-person event that’s the time to answer emails while keeping one ear open so you can answer future questions intelligently. If it’s virtual, time for a comfort break... but make sure the camera’s off.

## Hydrogen – hype, hope and hubris?

It’s an entirely different story when it comes to hydrogen. This technology is far from proven, but the hype’s ramping up so fast it’s hard to keep up. Eight working days into the new year (Thursday) and we already have 10 stories.

Unlike nuclear where many nod sagely but nobody seems to do anything, when it comes hydrogen everyone’s on a JV or speculating-to-accumulate with an advisory mandate on this, that or the next project. There are enough to choose from.

And the news is all very positive. A key development in Australia sees the first round of funding agreed for the [Australian Clean Hydrogen Trade Program](#) (ACHTP) to develop its export to Japan.

Staying in Australia, Japanese conglomerate Sojitz Corporation, Oz utility CS Energy and Nippon Engineering Consultants embarked on [a demonstration project](#) to test the feasibility of transporting hydrogen to the Republic of Palau.

And the news just keeps rolling in with the [Clean Hydrogen Infrastructure Fund](#) holding its €1 billion first close; UK-based energy developers [Carlton Power and Stag Energy](#) merging their operations; thyssenkrupp Uhde Chlorine Engineers signing up to deliver for Shell [a 200MW electrolyzer](#) for green hydrogen in the Netherlands.

There’s so many plans, projects, JVs and announcements in the global hydrogen sector that it’s hard to keep up and a nervousness from the IJ side that it ends up dominating the daily newsletter.

It’s difficult to put [hydrogen in a nutshell](#) better than Federico Turegano – Societe Generale global head of natural resources and infrastructure – who in an interview last summer (2021) hit the nail on the head.

Federico said: “This time around, there is recognition that hydrogen is here to stay. Some of us are old enough to have seen hydrogen a few decades ago, but this time it’s taking off – even if we don’t yet know how it will evolve.

“Look at the renewables market less than a decade ago. All we talked about was how we couldn’t wait until we could attach industrial scale batteries to wind farms so they can supply energy when the wind isn’t blowing.”

Hydrogen, Federico said, is reaching a comparable juncture and that with the entire community backing the likes of hydrogen and carbon capture, commercial viability was far closer than many think.

And that – to my mind – sums it up nicely.

Yes, there’s a touch of “build it and they will come” which is terrifying prospect, but with all these clever people working

on it, surely success is but a matter of time. Surely?

But then they've been saying that about nuclear fusion for years and – granted – just a week ago, China's "artificial sun" project sustained a reaction for more than 17 minutes... but that's still a long way from baseload!

So brace for a year of hydrogen JVs, project identification (usually tied in with energy supply from an offshore wind farm) and every conference producer on the planet having a brilliant idea for a panel discussion.

## Ocean power scene

And then you have marine energy – which encompasses everything from energy carried by ocean waves, tides, salinity, and ocean temperature differences – that provides a palate cleanser after nuclear and hydrogen and will surely feature big within the infra chattering classes.

Marine energy has always been a bit of an also-ran, possibly even a source of disappointment for many as it is illustrated with glorious pictures and glimmers of hope that are oft dashed when it becomes apparent the enormous piece of kit is only up to charging your phone.

At a casual glance, marine energy looks to be stuck in a pilot project rut. But possibly that's the view of a farmer's son rather than that of a marine energy specialist, most of whom will show more teeth than you expect to see while confidently expounding that it's on the up.

And it's hard to argue against that. This week IJ published a story on Eco Wave Power Global and Ocean Power Technologies (OPT) [combining technology forces](#) to accelerate wave energy projects.

Not meaning to rain on their parade, mention of OPT takes me back a few years (a beard, much grey hair and a few extra pounds) all the way to 2006 when I wrote about their magnificent machines and big [plans to power the planet](#).

Former OPT chief executive Dr George W Taylor at the time (2006) said: "When we decided to do an IPO two years ago (2004) we talked to bankers in Wall Street and it became clear there was not much interest in renewable energy.

"By comparison, in the UK and Europe there was a thorough understanding of the need for renewable energy and the fact that countries over here have signed the Kyoto accord allows for the subsidies necessary for technology like ours to make the transition from the early stage to full commercialisation."

That was a good call, but I don't believe the North Sea is now littered with PowerBuoys whereas Spiderman could probably make it from Norwich to the Netherlands swinging from one offshore wind turbine to the next!

Further, it is with embarrassment that I note the last time we wrote about OPT was 2012.

But there is a company that we have been writing about in the last decade – and that is Orbital Marine Power. During the first lockdown (July 2020), Orbital CFO Chris Milne talked us through his company's fascinating [floating tidal turbine technology](#).

And then, just before Christmas, Orbital cropped up in IJ's news when Perpetuus Energy [received planning permission](#) from the Isle of Wight Council (UK) for an onshore substation for its tidal energy generation project west of Ventnor.

The Perpetuus Tidal Energy Centre (PTEC) will create "England's first multi-MW tidal stream power generation project" on the IoW, deploying Orbital's O2 turbines. Construction of the 30MW substation is slated to start in 2023 with completion planned for 2025. Full operation is scheduled to start in 2026.

Now, at 30MW it's a far cry from the 1.4GW [Hornsea 2 Offshore Wind Farm](#) but it's a healthy development for tidal that bodes well for the future and a ramp-up in this renewable energy sub sector.

## A year in preview

So there you have it. Every conference in the infra space will be dominated for the coming 12 months by energy with keynotes on nuclear, leading on to hydrogen, and rounded off by a session on wave power... because it's a little bit off the wall and you need to keep delegates interested. Plus – pretty pictures.

At IJ, we do not discriminate – so we will cover everything beyond these 3 subjects... but we expect to be inundated with releases on hydrogen, policy stories on nuclear and wonderful pictures of the utterly awesome O2.

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