

## Tiivistelmä/otteita artikkelista:

Massiivisesta tuulivoima investoinnista huolimatta, tuulivoima kattoi alle 4 % UK:n koko energian tarpeesta vuonna 2020.

Viime viikolla UK:n hallitus harkitsi tuulivoiman lähellä asuvien henkilöiden energialaskun alentamista. Hallitus harkitsee myös helpottavansa sisämaan tuulivoimarakentamisen vaatimuksia. Tämän helpotuksen tavoitteena on mahdollistaa paikallisten kaavoitusviranomaisten toimintaa niin, etteivät ne enää tarvitse paikallisten asukkaiden hyväksyntää. Ts tavoite on helpottaa tuuliyhtiöiden kaavoitusprosessia ja helpottaa jo ennestään erittäin kallian, etuoikeutetun, maiseman tuhoavan, ja säästä riippuvaisen teollisuudenalan toimintamahdollisuuksia. Tämä tuulivoiman suosiminen sitoo puolestaan UK:n entistä riippuvaisemmaksi maakaasusta, jota käytetään varavoimana.

UK:n tuulivoimateollisuus on massiivisen tuen kohteena. Tämä tuki – yhteensä yli 6 miljardia puntaa - on kerätty sähkölaskusta perittävällä ns vihreän veron tai maksun avulla. Tuulivoimateollisuudella on myös etuoikeus sähköverkkoon ja sille maksetaan kompensatiota, kun tuulivoimakkuus on liian kova, jolloin sähköverkko ei kykene vastaanottamaan kaikkea tuulisähköä.

Poliitikot ovat tuulivoimateollisuuden pauloissa – he uskovat tuulivoiman ehdottomaan hyvyyteen. Ekoprotestoijilla alkaa polvia heikottamaan pelkästään, kun he näkevät tuulivoimaloita sijoitetun villiin luontoon. Anti-kapitalistit eivät suostu kuuntelemaan yhtään varoituksen sanaa tuuliyhtiöistä.

Tuulivoima on ehdottomasti tehottomin energian tuotantomuoto. Se on myös erittäin kallis ja epäluotettava tapa tuottaa energiaa, ja vaatii fossiilista energiaa tuekseen. Tuulivoimalat eivät ole myöskään hyväksi luonnolle. Ne tappavat tuhansia lintuja ja lepakoita joka vuosi, usein uhanalaisia kotkia. Mikä tahansa muu rakentaminen joutuu vastuuseen, jos aiheuttaa ongelmia yhdellekin lepakolle. Tuulivoimaloiden lapojen kierrätys on lähes mahdotonta. Ne tarvitsevat harvinaisia metalleja, kuten neodymiumia, joka on turbiinien sisällä olevien magneettien toiminnalle välttämätöntä. Sitä tuotetaan Kiinan erittäin saastuttavissa kaivoksissa.

Tuulivoimateollisuus lupaa, että jos rakennamme lisää tuulivoimaloita, niin jossakin tuulee aina. Kokemus osoittaa kuitenkin päinvastaista. Esimerkiksi viime viikolla ei tuullut missään päin maata. Sen sijaan edellisellä viikolla koko maassa oli tuulista.

International Journal for Nuclear Power julkaisi jokin aika sitten tutkimuksen, jossa tarkasteltiin tuulivoimaa ja energia-asioita 18 maassa, ml Saksassa. Fyysikko Thomas Linnemanin mukaan: 1) Euroopassa tuulivoima vaatii käytännössä aina 100 % varavoimaa, ja 2) Tuulivoiman rakentamiseen ja ylläpitoon tarvitaan fossiilisia polttoaineita.

Tilikirjojen tarkastelu osoittaa, että monissa tuulivoimaloissa turbiinien vaatimat ylläpitokustannukset ovat 15 vuoden käytön jälkeen niin mittavat, ettei niiden käyttö ole enää taloudellisesti järkevää. Kaasuturbiinilla taloudellinen käyttöaste sen sijaan on 30–40 vuotta.

Linneman toteaa myös, että ydinvoiman taloudellisuus on kärsinyt tuulivoiman tukien ja etuoikeuksien vuoksi (pääsy sähköverkkoon). Ydinvoimaloita suljetaan etuajassa, tai rakentamispäätöksiä perutaan, sillä ydinvoimalat eivät voi kilpailla tuetun ja etuoikeutetun tuulivoimalla tuotetun sähkön kanssa. Ydinvoima ei voi myöskään toimia taloudellisesti ns varavoimana silloin kun ei tuule. Ydinvoimalat ovat tehokkaita, kun ne ovat tasaisessa tuotannossa. Tästä johtuen tuulivoiman varavoimana käytetään maakaasua.

Tuulivoimateollisuus väittää, että sen kustannukset ovat laskusuunnassa, ja että sen tuottama sähkö on edullisempaa kuin maakaasun tai kivihiehellä tuotettu sähkö. Data kuitenkin osoittaa, että tuulivoimateollisuuden kustannus per tuotettu Wh on kasvussa – näin toteaa professori Gordon Hughes Edinburghin yliopistosta. Myös tuulivoiman rakentamiskustannukset ovat jyrkässä kasvussa, sillä polttoaineiden ja raaka-aineiden hinnat ovat nousseet merkittävästi.

Tuulivoimateollisuudelle maksetaan haittakorvausta eli kompensatiota kun niiden tuottama sähkö ylittää väliaikaisesti sähköverkon vastaanottokyvyn. Skotlannissa joillekin tuulivoimaloille on maksettu, kun ne ovat 'heittäneet' ison osan tuottamastaan energiasta pois. Nämä kompensatiomaksut aloitettiin vuonna 2010, ja sen jälkeen kuluttajien sähkölaskussa maksama kompensatio tuulivoimateollisuudelle on ylittänyt 1.1 miljardia puntaa. Tässä summassa ei ole huomioitu tuulivoimalle osoitettuja suorita tukia. Näistä asioista

tuulivoimateollisuus ei halua keskustella, vaan ne keskittyvät kehumään tuulivoiman tuottaman sähkön edullisuutta. Samaan aikaan tuulivoimateollisuus ei halua luopua näistä tuista, vaan vaatii niiden jatkumista.

Tällä hetkellä muut energiasektorit maksavat tuulivoimateollisuuden varavoiman ja sähköverkon ylläpidon – ts muu energiateollisuus maksaa tuulivoimateollisuuden etuoikeudet.

# The Madness Of Worshipping Wind Power

*Published on April 1, 2022*

Written by Matt Ridley



For too long, wind power has been championed to the exclusion of virtually all other energy alternatives. **That must end.**

Take a wild guess at how much of the UK's total primary demand for energy was supplied by wind power in 2020.

Half? 30 per cent? No, in fact, **it was less than four per cent.**

That's right, all those vast wind farms in the North Sea, or disfiguring the hills of Wales and Scotland, give us little more than one-thirtieth of the energy we need to light and heat our homes, power our businesses or move our cars and trains.

Last week, Government ministers were considering lowering people's energy bills if they live close to onshore wind turbines.

They're also considering relaxing the rules **so that onshore wind farms no longer need the backing of local communities and councils in order to get planning permission.**

This will give wind farms an easier ride through the planning process than new housing — or shale gas drilling sites.

More importantly, **it means further privileging an industry that has cost a fortune, wrecked green and pleasant landscapes and made us dependent on the weather for our energy needs** — and thus more wedded to natural gas as a back-up.

The wind industry has already been fattened on subsidies of more than £6 billion a year (paid for out of green levies on your electricity bills), it has privileged access to the grid and is paid extra compensation when the wind blows too strongly and the grid cannot cope with the energy output.

Indeed, the way wind power has managed to get politicians and others to think it is uniquely virtuous will deserve close study by future theologians.

Its symbols, akin to a post-modern Easter crucifix, now adorn almost any document that purports to be about British energy needs, signalling 'goodness'.

Tousle-headed eco-protesters go weak at the knees when they see an industrial wind farm on wild land, while angry anti-capitalists won't hear a word against the financial firms that back wind companies, somehow convincing themselves that this is all about re-empowering the common man.

When faced with a looming energy crisis, it's obvious that the Government needs to act fast to secure energy self-sufficiency.

But what is so special about wind?

Why, to the exclusion of all else — in particular, fracking and nuclear energy — has arguably **the most inefficient solution** been privileged?

I was once a fan of wind power, because it seemed to be free. But it's not.

It takes a lot of expensive machinery to extract useful power from the wind.

And once turbines are up and running, they're not reliable.

Because you cannot store electricity for any length of time without huge cost, wind farms need backing up by 'fossil-fuel' power stations.

**This makes wind even more expensive.**

As I write this article in still, fine spring weather, millions of tonnes of turbines stand largely idle, generating just three per cent of our electricity.

Coal contributes five per cent.

As a source of energy, wind is so weak that to generate any meaningful electricity output you need three 20-tonne carbon-fibre blades — each nearly the length of a football pitch — turning a 300-tonne generator atop a gigantic steel tower set in reinforced concrete.

**Hundreds of these monsters are required to produce as much electricity as one small gas-powered plant.** In terms of land covered, wind takes 700 times as much space to generate the same energy that one low-rise shale gas pad can.

It is not as if wind turbines are good for the environment. **They kill thousands of birds and bats every year**, often rare eagles on land and soaring gannets at sea.

If you were even to disturb a bat when adding a conservatory, you could end up in jail.

The wind turbines are also near impossible to recycle, with the rare earth metals such as neodymium that are vital for the magnets inside most of their generators coming from polluted mines in China.

Wind turbines are often built on hills to catch the breeze, meaning they inevitably intrude into natural beauty.

My favourite Northumbrian view, of Bamburgh Castle and Cheviot from the Farne Islands, is now visually polluted by a giant wind farm.

But for those who live closer to them, life can be intolerable.

The unresolved problem of wind turbine noise can make sleep difficult.

On sunny days, the shadows of the blades create an unnerving flicker as they pass your windows.

Being next to a wind farm won't enhance your house's value — and I doubt any reduction in your energy bill would help.

Nor is it clear that wind farms reduce emissions significantly.

If the meagre four per cent of our energy that came from wind in 2020 had entirely displaced coal, we would have seen at least a modest cut in our emissions.

But there are three reasons why that is not what happens.

**First, we need other power stations to back up the wind farms when the wind does not blow**, and these plants — mostly burning gas — are inevitably less efficient when being ramped up and down to support wind's erratic output.

The wind industry promises that the more wind farms we build, the more likely we are to find there will always be a breeze somewhere.

But experience shows the opposite. Last week, for instance, was virtually still everywhere; the week before was windy everywhere.

A recent study published in the International Journal for Nuclear Power, looking at Germany and 17 neighbouring countries, confirmed this erratic output.

Its author, physicist Thomas Linnemann, wrote:

*'Wind power from a European perspective always will require practically 100 per cent back-up systems.'*

Second, wind turbines themselves are built and maintained using 'fossil fuels'.

Analysis of audited accounts suggests that **many wind farms will not work for much more than 15 years** before the cost of maintaining the machine eats into income and it has to be scrapped and replaced.

The capital refreshment cycle for these machines is very short.

A gas turbine on the other hand can easily last 30 or 40 years.

Third, the one source of energy whose economic rationale has been most damaged by wind power is zero-carbon nuclear.

Nuclear plants all over the world are closing down early, or being cancelled, because they cannot pay their way in a world where bursts of almost valueless wind energy keep being dumped into the grid.

Nuclear plants cannot 'fill a gap' when the wind drops — they're efficient only when generating constantly.

A wind-powered grid can be backed up with gas, or a nuclear grid topped up with gas, **but a grid powered by wind and nuclear will not work.**

Wind's champions insist its costs are coming down and that its electricity is now cheaper than from gas or even coal.

But there is a great deal of data, all pointing to industry costs (per megawatt-hour) **not falling but rising**, as economics Professor Gordon Hughes of Edinburgh University has found.

Building and maintaining wind farms is about to get even more costly because of the rocketing costs of fuel and raw materials.

As for the competition, gas is currently very expensive in Britain, but it used to be cheap and it could be once more — **particularly if we open up the North Sea and get fracking.**

Then there's the cost of 'constraint payments', which means extra compensation paid (by you, the electricity consumer) to wind farms **when the grid cannot cope with their output.**

Some wind farms in Scotland have been paid to throw away large fractions of their energy.

Since the introduction of the payments in 2010, **the cost to consumers has topped a staggering £1.1bn.**

That's before you consider the subsidies, which data shows have been rising for offshore wind for two decades.

When the wind industry boasts of being cheap and you challenge them to forgo subsidies, they mutter and look down at their feet.

This happened at a parliamentary select committee this month: **boasts of cheapness followed by protestations that subsidies must be maintained.**

Something doesn't add up.

Even these costs understate the problem because they do not include the huge 'system costs' in reconfiguring and operating the national grid to cope with more unreliable energy if we continue our mad dash to wind power.

These costs would be shared by all power sources, **so wind's competitors would pay for wind's privileges.**

Here is what Professor Hughes and Dr John Constable of the Renewable Energy Foundation said recently:

*The assumptions which underpin the BEIS [Department for Business, Energy and Industrial Strategy] estimates of the cost of generation for wind and solar power are fanciful, and do not withstand even cursory scrutiny; under close analysis they disintegrate and are a disgrace to the civil service and an embarrassment to ministers.*

*They are so far from the actual costs incurred ... and recorded in audited accounts that they are not worth further consideration, except as evidence for fundamental civil service reform.'*

Why is this so important? Professor Hughes explains:

*The Government is creating a situation in which it will have no option other than to bail out failed and failing projects to ensure continuity of electricity supply.*

*Ultimately [the losses] will fall largely on taxpayers and customers.'*

Thousands of words, mine included, have been written, demonstrating the **deluded obsession with wind** — and the huge benefits of untapped alternatives, particularly shale gas (accessed through fracking) and nuclear power.

These arguments are based on reason and data.

Yet the Government dismisses them with bluster and deflection, standing up instead for the wind industry.

Someone needs to start standing up for the rest of us.

<https://www.dailymail.co.uk/news/article-10657721/Madness-worship-wind-despoil-glorious-countryside-add-6bn-household-bills.html>