



WRITTEN REPRESENTATION

THE LITTLEHAMPTON SOCIETY (FROM ELIZABETH LEANNE MAROGNA) IP no 20045429

The Committee of The Littlehampton Society has the strong conviction that this Application is not an example of Sustainable Development.

The negative impacts of Rampion 2 would demonstrably outweigh the National benefits. Adverse impacts would be felt by both current and future generations of residents and visitors, as well as wider UK society nationally in the form of opportunity costs. These deleterious effects are also experienced by the natural world – marine life will be literally blasted by the sonic arrays from pile-driving the turbines into the seabed, with vast amounts of sediment disturbed, potentially smothering the returning kelp forests (in their infancy) and filter-feeder invertebrates. One of the most significant risks from this project (offshore) is that of non-native invasive species. This could be an organism that comes via the bottoms of support vessels and takes advantage of a non-native ecosystem. A good example of this is Slipper Limpets. Brought over from America in the 19th century, on the south coast the beaches are literally littered with them. They have exploited an ecosystem they are able to thrive in, at the expense of native creature. **If the balance in the delicate ecosystem of the kelp beds is changed, the outcome could be disastrous. The kelp beds are a carbon sink and protect and feed countless marine creatures.**

The Rampion 2 proposed location, in our opinion, breaches the European Convention on Landscapes and defies the Governmental advice that NSIPs of this scale should be at least 25km from National Parks as they are highly sensitive receptors, places where people come from all around to relax, enjoy recreational activities and exercise. The South Downs National Park is protected and this includes the vistas enjoyed looking out from it. The cable route would, if granted, scar the National Park and also in the process tear up hedgerows, trees and disturb habitats, many of them irreplaceable.

Infrasound from operation, including 'blade-thump' (a known phenomenon) are some examples of noises that cause stress-pattern behaviour in trials on rodents. This would be a sonic array over water – the high Sound Pressure Levels pushing lower frequencies (Hertz) towards the population

could have devastating psychological and physiographical effects, compounded by the fact Littlehampton is one of the most deprived areas in the county.

The Rampion 2 consultation procedure, in our experience, was not handled at all well. It was not convenient for our membership, many of who are elderly and not computer savvy, that the consultation was online almost in its entirety. This is an Nationally Significant Infrastructure proposal effecting every part of our town and the natural environment that surrounds it, being its best feature to help the community rise above the economic depression it easily slips into. Tourism is one of the most reliable forms of income for many businesses in Littlehampton. If tourism were disrupted, as it would be with a large-scale industrial power plant being installed and operating for 25 years, Littlehampton would inevitably sink deeper into economic depression. The government has awarded Littlehampton a Levelling Up Fund of several million pounds – this is for the Seafront Regeneration Scheme. The Levelling Up Fund goes hand in hand with the European Convention for Landscape – this policy recognises the need for landscape protection and giving communities a helping hand – this project would go against these objectives by its very existence.

Insects are in drastic decline and insect-die-off is a frightening phenomena. Any further stress on insect populations could spell disaster to humans but more importantly to all life – from plants to animals. The Applicant has not once mentioned insects in their Scoping Report, Preliminary Environmental Impact Report nor Environmental Statement.

There are around 4 billion insects crossing the Channel annually for migration, along with them birds and bats. There is no mitigation for turbines in their path, in the zone of height where they fly.

Most people are aware of the Lepidoptera Rhopalocera, butterflies, that migrate here i.e. Painted Lady from Africa to UK and back, there are 9 other butterflies that migrate to and fro the UK.¹ Migrating Lepidoptera Heterocera, moths, there are 112 migrating Large moths that are labelled Rare, 13 that are labelled Red Data Book. There are 1600 species of Micro moth in UK, many of whom would be migrants. No figures as yet.²

There are many more orders of insect that migrate across the south coast of the UK. Diptera, flies Syrphidea, hoverflies. Between 1 and 4 million hoverflies migrate into and out of the UK each year. They consume 3 – 10 trillion aphids so provide an important pest control. They are also pollinators. “Migrant hoverflies play a vital role due to declines of other beneficial insects.”³

For three decades, scientists have reported the build-up of dead insects on wind turbine blades in different regions around the world. Researchers in Germany found a 76 percent decline in flying insects biomass in conducting a 27-year population monitoring study. The threat to insects is also a threat to birds and bats, and wind turbines are a threat in themselves to the latter. Researchers

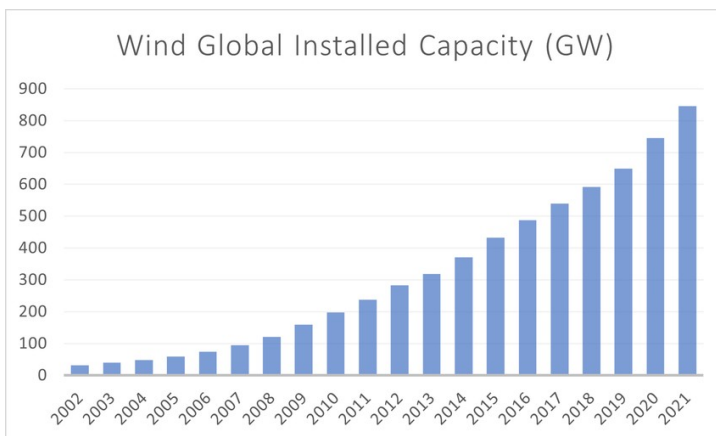
1 Newland and Still, 2010, Britains Butterflies, 2nd Edit

2 Townsend and Waring, 2019, Concise Guide to Moths of Great Britain and Ireland, 2nd Edit

3 Wotton et al, 2019, Current Biology 29, 2167-2173

have found that wind turbines in Germany resulted in a loss of about 1.2 Trillion insects of different species each year. Insect die-off also reduces the efficiency of the wind turbines. In 2001, researchers calculated that the build-up of dead insects on wind turbine blades can reduce the electricity they generate by 50 percent. They found that wind turbines are akin to adding a top predator to the ecosystem, killing off birds, but allowing small animals to increase their populations resulting in a trickle effect throughout the ecosystem. Wind turbines are the single greatest human threat to migratory bats, which live in different habitats during summer and winter months.⁴

Germany says wind industry causes death of 1/3 of total migration in South England, comparison scientists say that equals 1 trillion per year. In 2007 researchers calculated that insects had been reduced by 50%, now 2023 it's by 70%.⁵



This figure shows the increase in Installed Global Wind Capacity (GW). It can be reasoned that insect mortality recorded would increase proportionate to higher installed wind capacity.

(Figure from https://www.researchgate.net/figure/Global-wind-installed-capacity-from-2002-to-2021-Data-taken-from-28-29-accessed-on-1_fig1_369588823 last accessed 28 Feb 2024)

Thank you for taking this Written Submission into consideration.

Sincerely,

**Elizabeth Marogna
Hon. Secretary
The Littlehampton Society**

⁴ Wind Turbines Against Nature 19 July 2016 IER www.instituteforenergyresearch.org/renewable/wind/wind-turbines-against-nature/

⁵ Forbes Magazine, 2023 M. Schellenberger