

All political parties in the Swedish parliament

The proposal for the removal of municipal wind power is a serious threat to public health, ecosystems, forestry and democracy

This centralization of power to central government and state environmental assessment delegations can have irreparable health effects for affected citizens and future generations.

The current state-controlled environmental assessment process has major deficiencies which also cause serious threats to public health and damage to the environment, biodiversity, ecosystems and the Swedish forestry industry.

It has long been known that the applied regulations and the calculation models for wind power noise is unrealistic for the new high altitudes, in areas with low background noise in cold Nordic climate. Noise disturbances are experienced in triplicate distances in the prevailing wind direction.

Current environmental permits are based on irrelevant "practice" of 40 dBA, which excludes about 60 % of the total noise energy below 200 Hz and 100 % of the harmful irreplaceable infrasound pulses.

Mechanical infrastructure pulses have brighter sound profiles than natural sinusoidal infrasounds. The German specialist physician group Ärzte für Immissionsschutz, indicates that the infraenergy pulses should not exceed 60 dB to avoid medical effects during longterm exposure. This limit is undermined only about **10 km** from **one single** turbine.

The Swedish state is heavily responsible for the underestimation of the negative health effects of infrared noise and they powerful noise shocks that arise at the wing's tower passage. In addition, a German/Greek report shows that the wind turbines generates powerful ground vibrations that interact with the acoustically transmitted infra-energy shocks and provide reinforcing effect in building constructions over 10 km. Scientific reports at the laboratory level shows the connection with attenuated brain functions and pathological changes of heart pericardium and lung tissue. Environmental assessment delegations have for a long time dismissed scientific evidence.

The Swedish Environmental Protection Agency has rejected the request for a new regulatory system for infra-energy waves below 31.5 Hz.

The serious health effects are a global problem and have recently been confirmed

1. American study, showing significant correlation between increased suicide statistics and large-scale wind farms.

Wind Turbine Syndrome: The Impact of Wind Farms on Suicide. Eric Zou. October 2017.

The report shows the relationship between large-scale wind farms in the US 2001-2013 and significant increase in suicide;

(a) among individuals vulnerable to noise-induced diseases, e.g. older people

b) suicidal action on days when the wind blows in directions that would increase residents exposure to low-frequency sound emission

c) data from a large-scale health survey suggests increased sleep insufficiency adjacent to new wind turbines

d) Effects may occur up to 25 km.

The report was based on public databases, including:

US Energy Information Administration, providing information about wind farm data, position, capacity and month of commissioning from a total of 828 wind farms in 39 states in the US from 2001 to 2013.

National Center for Health Statistics' Vital Statistics Multiple Cause of Death Data. The suicide rate was defined as the proportion of people in a county, which died due to suicide in relation to the total population during the year.

2. Australian Administrative Appeals Tribunal. Judgment 2017-12-04. The court states that noise disturbances caused by low-frequency sound and infrared noise from wind turbines "*are a likely*

path to disease" based on "established interrelationship between disorders and some diseases, including high blood pressure and cardiovascular disease, possibly partly caused by disturbed sleep and/or mental stress". The court also emphasized that "the dB(A) weighting system is not designed to measure wind power and not suitable for measurement."

All of the above relationships confirm the complaints received by affected citizens regarding increased sleep disturbances and health problems and the scientific reports presented regarding incorrect noise calculations and measurement methods and left unobtrusive.

The statistically secured distance of 25 km is extremely serious as Sweden is already covered by large coherent noise mats. Belgian researchers warn of the disturbance of children's development and learning ability. Unclear knowledge also about effects during pregnancy. EU Environment focuses now on infrasound health risks and has presented a very clear warning on their website "Invisible enemy", infra-energy waves (2017-06-02). The Swedish WHO expert Göran Pershagen (KI) had a prominent role at the EU Commission Conference Noise in Europe (Brussels, 2017-04-24) there he reported cardiovascular effects and the importance of not underestimating the health hazards of the noise.

The Environmental Party's mission to the Swedish Energy Agency and the Swedish Environmental Protection Agency to draw up proposals to wind down municipal veto rights can thus lead to increased central power based on irrelevant decisions based on "political correct authenticity", which implies threats to both public health and democracy.

In addition to obvious health risks, the evidence is strengthened that wind power plants can cause serious effects on biodiversity, ecosystems and forestry over long distances.

- lowered vegetation index, about 15%. Impact > 9 km. Chinese report based on satellite surveillance with spectral radiometry shows that elevated night temperature causes no dew point and dehydration during the sensitive germination phase of the plants. In addition, it is stated that the vegetation cannot be restored after the construction phase, which indicates that the wind turbines change the growth environment.
- Cooling effects daytime. Reduced local temperature 1 - 2 °C, turbulence decreases to 10 km. Ising, cracked branches, frozen top shoots and turbulence whirls that risk storm decay.
- Low frequency noise and infra-energy pulses can kill the insect fauna. Dutch scientists report that the number of flying insects in 60 German natural areas has decreased by more than 75 percent since 1989. One hypothesis is that the vibratory signal systems (over a few meters) of the insects are blocked by the powerful pulses of the wind turbines in the 20-60 Hz frequency range. Germany has about 30,000 wind power plants. Effects on pollination and degradation of plant parts can then occur over 10 km. 90% of the wild flowers are threatened with eradication if there are no insects pollinating them. Without insects, no food.
- Powerful ground vibrations can bother worms and insects with a lot of ground contact. Registered seismic > 20 km. The hypothesis is that birds do not find as much food as before.
- Soil vibration destabilizes peat layers in marshes and increases leakage of methane and acidified groundwater contaminated with heavy metals, methyl mercury and PFA molecules.
- Soil vibration compresses and hardens wet woodland
- Global wind power killing large amounts of natural predators, bats and swifts, etc. German researchers estimate that the European wind turbines kill more than 300.000 bats a year and warn of increased insect attacks and ecological crashes. Climate change means that Swedish forestry is threatened by invasive insect species and double insecticides. Insect-damaged conifers yield more terpenes, which are transformed into harmful ozone and break down leaves and barrels (ozolytic process). Sweden does not meet the EUROBAT Guidelines 2015.
- Copular effects of nanoparticles from wind turbine wings. Researchers at Lund University have shown that nanoparticles from plastics reduce survival of aquatic zooplankton. The particles penetrate the fish's brain barrier and cause behavioral disturbances and thus can wander through the food chain. The wings of a wind turbine consist of about 60 tons of epoxy resins, composite materials with environmentally hazardous additives such as Bisphenol (Allergent, Hormonal and Fertility Reduction), UV Filters (Titanium etc.), Zinc and Boron, Stabilizers (Calcium, Zinc,

Lead, etc. Cadmium and Tin), dyes, antioxidants, biocides, plasticizers and brominated flame retardants. The surface layers of the wings erode slowly and become porous. Weight loss is estimated at 1-2 % at the surface.

- Potential environmental damage. A work contains about 1.6 tons of oils and chemicals for hydraulics, gearboxes, transformers, lubricants and antifreeze. Future environmental debt through perpetual landfill (200 tons of concrete including 80 tons of reinforcement iron/turbine), cables, geotextile material and hard packed ground. The broad straight wounds in sensitive landscapes are irreparable. The cost of restoration is underestimated and will never be borne by future generations.
- Fragmentation of forests and mountains in violation of the EU Biodiversity Strategy by 2020, and in particular points 1b and 7b for the prevention of fragmentation of the Green Infrastructure and tightening requirements for state forestry companies. One turbine advances 1-5 hectares of land. A wind farm requires about 5 Swedish miles of roadway. Sweden has Europe's most fragmented forest road network.
- Long term habitat impact of red-listed species. Not least through passive action by environmental investigative delegations, county administrative boards, the Swedish Environmental Protection Agency, state wind power coordinators and the state forestry company Sveaskog AB, in direct contrast to Sweden's reporting to the EU Commission. Appendix. The residence permit for withdrawal of Sveaskog AB's FSC certificate. Among other things, based on non-compliance (Svea Hovrätt), strategic documents for the protection of 4-5 high-graded Golden Eagle-territories and an Eagle Owl territory, and EU directive for the protection of capercaillie habitats in Ängersjö, Härjedalen.

Current environmental assessment processes already imply that unreasonably heavy areas of rural population are forced to harm harmful noise and energy levels, ground vibrations, space constraints, lost natural experiences and recreational values, hunting and fishing opportunities, and changing local climate. Genuine cultural landscapes get industrial character through flashing warning lights and changing landscape scenes over several miles. Local residents are also forced to bear economic losses caused by lost property worths, availability and intrusion, increased power grid costs, inferior tourism and other industries. This leads to subordinated property maintenance, lower housing standards, settlement and continued depopulation. Forest owners suffer from lower vegetative growth, heavy metal leaks and plastic nanoparticles, as well as noise mats and ground vibrations that can break out microfaunas and ecosystems over long distances. In addition, insect attacks increased by the killing of important insect propagators. Reduced forest production in sensitive monocultures leads to negative climate effects.

This is a signal of reflection, holistic view, review at national level and enhanced implementation of Union directives. We now see a completely different picture and need for a change of direction for the Swedish environmental review process. We believe that the bottom is reached and that the country is exposed to severe environmental and public health strains, whose effects we cynically pushing forward towards the future. These injuries are partly already irreparable. It is no longer a matter of "limiting injuries and inconvenience". It is also about

- accepting the impact of the new super tall wind turbines and their threat to ecosystems and biodiversity
- realize the risks to human health
- realize the local population's loss of quality of life and forcing economic sacrifice
- realize the threat of Swedish forestry
- realize the urgent need for action to reexamine regulations for noise and infrastructure energy, regarding limit values, calculation methods, measurement methods and supervision
- develop and comply with biodiversity protection strategies under the EU's 2020 Forestry Development program with green infrastructure and fewer large destructive forest fellings. The regional action plans to be presented by the county administrative boards in 2018 must be based on the landscape perspective and also limit the negative effects of wind power noise mats.

- develop principles for limiting land use to a smaller number of optimally located industrial plants in order to release areas for biodiversity protection in accordance with the Swedish Environmental Protection Agency's revised report, *The impact of wind power on birds and bats*.
- develop the proposals in the final report of the Parliamentary Rural Development delegation regarding reassessment of centrally determined land interests and support for vital rural areas.

This is not specific to the residents of Ängersjö. This is a major escalating social problem, as serious for the future as the generally increasing sentiment of central government and exclusion. There is increased frustration about the fact that all local representatives are denied the right to speak in court, while a London-based finance company and a state-owned forestry company are allowed to act in violation of law, EU directives and new scientific facts. We see this is the phase two of the "Baggböleriepoke" /Note: In late 1800 - when companies got owner of the forests for a few pennies/, where a genuine cultural community now also can lose the right to the silence and protection from intrusion into its own dwellings. We can state that both the county administrative board and the Swedish Environmental Protection Agency have rejected the residence permit to act for recall in the Ängersjö-cases, even though the Golden Eagle-habitats are "Immune" according to the judgment (Svea Hovrätt), the County Administrative Board's Strategic Document (Vallonien-case in EG-court), the Swedish Environmental Protection Agency's definition of "*intentional killing*" and criteria in the EU Bird and Habitats Directive. For this reason, the Environmental Protection Agency has stated inadequate resources and the projects are too small (5 + 5 works). These reasons have been rejected by the Nacka District Court which has referred the case, referring to its national obligations under the preparatory work to the Environmental Code. The Environmental Protection Agency has appealed against the return decision to Svea Hovrätt. The Environmental Protection Agency hereby deviates from its own guidance for implementing the EU Bird and Habitats Directive in the Art Protection Ordinance. This is precarious from an EU perspective. We currently have a win-win situation for the reassessment of wind power's negative effects on public health, ecosystems and forestry. Technical development and offshore wind power will enable more optimal solutions within five years (10-15 MW/turbine). Realistic reassessment of unfinished projects and ongoing environmental assessment processes can therefore give major national economic benefits and reduced infrastructure costs. We hereby insist that the Swedish Energy Agency's and the Swedish Environmental Protection Agency's proposal for the abolition of municipal wind power will be removed and measures taken to remove the negative effects of wind power on public health, ecosystems and forestry.

A Happy New Year in all parts of the country

Halmstad 2017-12-30

Ove Björklund
The Association for Swedish Landscape Protection
Dagsländevägen 27
302 56 Halmstad

Annex. The residence permit for withdrawal of Sveaskog AB's FSC-certificate.