

August 18, 2022

REGARDING THE IMPACT ON THE BIRDS LIVING IN THE TERRITORY OF THE REPUBLIC OF LATVIA OF UP TO 6 WIND TURBINES PARK IN AKMENĒ DISTRICT MUNICIPALITY, KRUOPIAI ELDERSHIP, C1 ZONE

The potential impact on birds due to the proposed economic activity, i.e. UAB Windfarm Akmenē Two of up to 6 wind turbines park in Akmenē district municipality, Kruopiai eldership, C1 zone, was assessed taking into account the data from official databases “Development of Wind Energy and Territories Important to Biodiversity (VENBIS)” and “Information System of Protected Species (SRIS)” where long-term observation data of the birds are collected: migrating, breeding and wintering periods, as well as feeding sites. According to the VENBIS and SRIS data, it was determined that the territory of the proposed economic activity is not sensitive to birds.

Moreover, field research studies were carried out in the zone of direct impact of proposed economic activity. Studies have been carried out using the point bird survey at or near wind turbines sites. The research focused on the composition of bird species, including migrating, feeding and nest sites.

The area of the proposed economic activity is relatively small with mainly cultivated land, where are no naturally valuable habitats, the usual bird species of the agricultural landscape lives there and the birds of prey only come to feed, so the impact on bird populations will be minimal or neutral. Nevertheless, the monitoring of dying birds will be carried out for at least 3 years after the beginning of the operation of the wind turbines.

It should also be noted that the location of the proposed economic activity (as well as the nearest territories of the Republic of Latvia) is located at the continental land where the flow of migratory birds is insignificant, since the main migratory bird flyways go along the coast of the Baltic Sea.

At a distance of more than 6 km from the planned wind turbines in the north-east direction on the territory of the Republic of Latvia, there is a Natura 2000 area “Ukru gārša” which is important for the protection of birds. However, due to the large distance between the proposed wind turbines site and the Natura 2000 area, there will be no negative impact on “Ukru gārša”.

The conducted field research studies confirmed the conclusions based on the data of the VENBIS and SRIS that planned wind turbines construction site is not sensitive to the birds. Therefore, a negative impact is not expected not only at the location of the proposed economic activity, but especially on the territory of the Republic of Latvia.

In conclusion, based on the data of the long-term observation databases of the birds and the results of the conducted field research studies, it was determined that there will be no negative impact on the birds living in the territory of the Republic of Latvia.

Expert ornithologist Aurelijus Narbutas



August 19, 2022

REGARDING THE IMPACT ON THE BATS LIVING IN THE TERRITORY OF THE REPUBLIC OF LATVIA OF UP TO 6 WIND TURBINES PARK IN AKMENĒ DISTRICT MUNICIPALITY, KRUOPIAI ELDERSHIP, C1 ZONE

The potential impact on bats due to the proposed economic activity, i.e. UAB Windfarm Akmenē Two of up to 6 wind turbines park in Akmenē district municipality, Kruopiai eldership, C1 zone, was assessed taking into account the data from the official databases “Development of Wind Energy and Territories Important to Biodiversity (VENBIS)” and “Information System of Protected Species (SRIS)” where long-term observation data of the bats are collected: breeding, feeding and migrating sites. It was determined that the territory of the proposed economic activity is not sensitive to the bats.

Additionally, a transective and a spot bat counting survey methods were applied in the zone of direct impact of proposed economic activity. No bat breeding colonies were detected in the planned area of the wind turbines: C1 zone is not important for the bats as feeding grounds, since it is dominated by agricultural land where monocultures are grown. Such habitats are unattractive to the bats due to the poor diversity and abundance. There are also no larger bodies of water in the area, that are necessary for bat breeding colonies. The conducted survey confirmed the conclusions based on the data of the VENBIS and SRIS that the planned economic activity location is not sensitive to the bats. Therefore, a negative impact on the bats is not expected. Nevertheless, the monitoring of dying bats will be carried out for at least 3 years after the beginning of operation of the wind turbines.

It is worth to note that there are no identified large populations of migratory bats at the site of the planned economic activity thus a negative impact on bats living in the Republic of Latvia is not expected.

Based on the results of the conducted survey and data of the long-term observation databases of the bats, it was determined that there will be no negative impact on the bats living in the territory of the Republic of Latvia.

Chairman of the Society for the Protection
of Bats in Lithuania Deividas Makavičius



August 17, 2022

REGARDING THE IMPACT ON A LANDSCAPE OF THE REPUBLIC OF LATVIA OF UP TO 6 WIND TURBINES PARK IN AKMENĒ DISTRICT MUNICIPALITY, KRUIPIAI ELDERSHIP, C1 ZONE

In order to assess the potential impact on landscape due to the proposed economic activity, i.e. UAB Windfarm Akmenē Two of up to 6 wind turbines park in Akmenē district municipality, Kruopiai eldership, C1 zone, the assessment was carried out by taking into account the European Landscape Convention, Recommendation CM/Rec(06-02-2008) of the Committee of Ministers to member states on guidelines for the implementation of the European Landscape Convention, etc.

The visual impact assessment of the landscape has shown that the impact of planned economic activity on the territory of Latvia will be insignificant. Wind turbines towards the territory of Latvia are surrounded by large areas of Karpēnai, Lydmiškis and Narčiai forests' arrays, which significantly reduce the visibility of wind turbines. The closest village to the planned wind turbines in the territory of the Republic of Latvia is Ukri (distance to the nearest planned wind turbine is 3 km). Due to the mentioned observation's distance and forests' arrays, the wind turbines from the outskirts of the settlement will be visible as landscape elements.

Based on the results of the landscape analysis, no negative impact on the landscape of the Republic of Latvia has been identified.

Dr. Jonas Abromas

Landscape Architect



August 18, 2022

REGARDING THE IMPACT ON PUBLIC HEALTH OF THE REPUBLIC OF LATVIA OF UP TO 6 WIND TURBINES PARK IN AKMENĒ DISTRICT MUNICIPALITY, KRUIPIAI ELDERSHIP, C1 ZONE

In order to assess the potential impact on public health due to the proposed economic activity, i.e. UAB Windfarm Akmenē Two of up to 6 wind turbines park in Akmenē district municipality, Kruopiai eldership, C1 zone, modelling of the noise and shadow flickering dispersion was carried out as well as the other possible physical pollution was evaluated, i.e. infrasound and low frequency sound, electromagnetic radiation, vibration.

In order to evaluate noise and shadow flickering dispersion WindPRO 3.0.654 software was used. This software allows to predict the potential shadow flickering effect in hours annually and noise dispersion in a specific living area even before the wind turbines start to operate.

For the assessment of noise dispersion the calculation standard ISO 9613-2 General and Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise, including its subsequent amendments, were applied. The negative impact of noise on the living environment was assessed based on the limit values, which are the same in Lithuania and Latvia: 55 dB(A) during the day, 50 dB(A) during the evening and 45 dB(A) during the night. The maximum permissible shadow flickering effect on the residential area according to German regulations is 30 hours per year.

After evaluating the results of the noise and shadow flickering dispersion modeling (taking into account the cumulative effect of the C1 zone), it was found out that the limit value 45dB(A) of noise occurs at a distance of about 300 m from the planned wind turbines (in the direction towards the Republic of Latvia), and the dispersion of shadow flickering for 30 hours/year is about 600 m from the planned wind turbines (in the direction of the Republic of Latvia). Considering the fact that the closest point from the Latvian-Lithuanian border to the planned wind turbines is at 800 m, and the nearest residential areas in the territory of the Republic of Latvia are more than 2 km away from the proposed wind turbines location, it was estimated that the limit values of the noise and shadow flickering in the territory of the Republic of Latvia and its residential areas will not be exceeded and there will be no negative impact on public health.

Other physical pollution also will have no negative impact on public health in the Republic of Latvia.

Taking into account the arguments above, no negative impact on the public health of the Republic of Latvia has been identified.

Dr. Mantas Marčiukaitis
Expert in renewable resources and efficient energy



August 17, 2022

REGARDING THE IMPACT ON ENVIRONMENTAL COMPONENTS (PROTECTED PLANTS, FUNGI AND NATURALLY VALUABLE HABITATS) OF THE REPUBLIC OF LATVIA OF UP TO 6 WIND TURBINES PARK IN AKMENĒ DISTRICT MUNICIPALITY, KRUIPIAI ELDERSHIP, C1 ZONE

In order to assess the potential impact on environmental components (protected plants, fungi and naturally valuable habitats) due to the proposed economic activity, i.e. UAB Windfarm Akmenē Two of up to 6 wind turbines park in Akmenē district municipality, Kruopiai eldership, C1 zone, field research studies were carried out in the zone of direct impact of proposed economic activity. The potential impact on the protected plants, fungi and naturally valuable habitats was also evaluated by taking into account the data from official databases such as Information System of Protected Species, Habitats of European Community Importance, Forest Cadastre, Wetlands and Peatlands and Crop Fields.

No protected plants, fungi and naturally valuable habitats will be destroyed or damaged in the territory of the Republic of Latvia considering the fact that the proposed 6 wind turbines will be constructed and operated only in the territory of the Republic of Lithuania. Roads and electric cables will be used or installed and laid only in the territory of the Republic of Lithuania.

Based on the results of the conducted field studies and official databases, no negative impact on the protected plants, fungi and naturally valuable habitats of the Republic of Latvia has been identified.

Sigitas Juzėnas

Biodiversity expert

