To the Environment State Bureau Rūpniecības Street 23, Riga, LV-1045

Name of the Proposer: LLC "EWE Neue Energien 1"

Registration No. 40203559480

Legal address: Marijas Street 2, Riga, LV-1050

Phone number: +371 2 9155187

Email address: info-lv@eurowindenergy.com

# Application for the proposed activity of constructing the "Valka" wind farm in the Valka municipality

In accordance with Section 4, Paragraph 1, Point 1 of the Law "On Environmental Impact Assessment" and Point 2 of the Cabinet of Ministers Regulation No. 18 of January 13, 2015, "Procedure for Assessing the Environmental Impact of Proposed Activities and Approving the Proposed Activity."

### Information about the proposed activity

LLC "EWE Neue Energien 1" is owned by one of the largest wind energy companies in Europe, "Eurowind Energy", which aims to expand the green energy network in Latvia. LLC "EWE Neue Energien 1" has planned to construct a wind farm "Valka" in the Valka municipality, with the intention of building up to 15 high-capacity next-generation wind turbines (hereinafter referred to as WTG), with a total capacity reaching 120 MW. The exact number of WTGs will be determined during the environmental impact assessment process, considering regulatory requirements for WTG placement, as well as evaluations by environmental and nature experts regarding the feasibility of constructing the WTGs.

When initiating the planning of the wind farm, LLC "EWE Neue Energien 1" identified a territory that is potentially suitable for the implementation of this project and has approached and reached agreements with landowners regarding their involvement in the wind farm development. However, given that circumstances may be revealed during the environmental impact assessment process that could require changes to the initial plan and possibly its scale, LLC "EWE Neue Energien 1" intends to conduct the environmental impact assessment in a larger area (hereinafter referred to as the research area), to ensure the best possible wind farm construction in the context of nature conservation and public health protection. The research area includes a total of 60 land parcels, the list of which is attached in Annex 1 of the application. Wind turbines and the related infrastructure will only be built on those land parcels where agreements with the landowners have been reached regarding the construction of wind turbines or the associated infrastructure. When analyzing potential wind turbine placement solutions within the research area, each residential building is considered, with turbines being placed at least 800 meters away from them. The placement of individual homesteads, as well as the proximity of villages such as Lugaži and Sēļi, and the towns of Valka and Valga, is also significant.

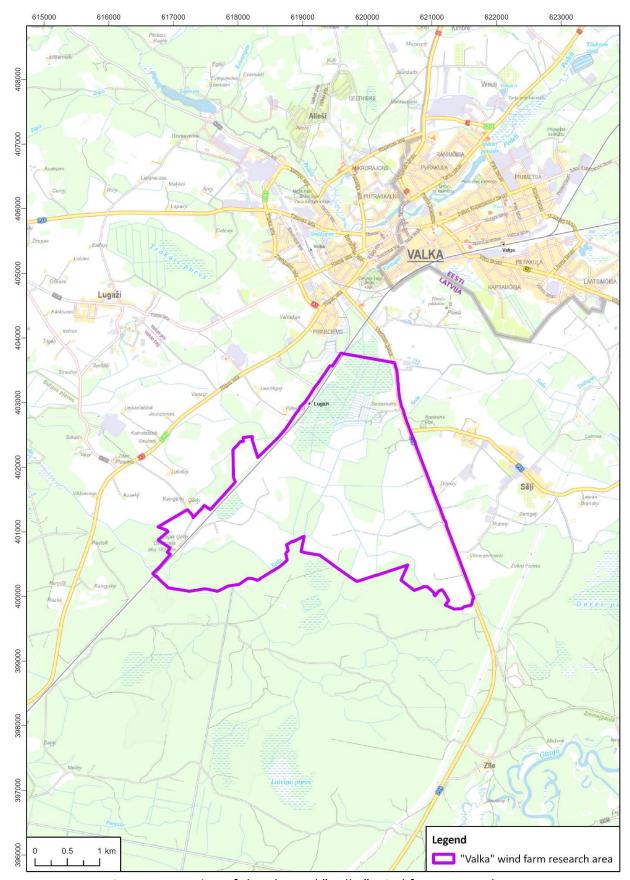


Figure 1. Location of the planned "Valka" wind farm research area

The proposer of the planned activity has not yet selected a specific wind turbine model that could be constructed in the planned wind farm. The choice of WTG model will largely be determined by the results of the environmental impact assessment, the production potential of a particular model, and its construction costs. During the environmental impact assessment, it is planned to evaluate and compare the latest WTG models from various manufacturers, such as Vestas, Siemens-Gamesa, Enercon, General Electric, or Nordex. The latest models from all these manufacturers share several common characteristics, which are important for describing the proposed activity:

- The nominal capacity of each turbine is approximately 8 MW;
- The tallest available WTG towers can reach a height of 175 meters;
- The rotor diameter of the WTGs ranges from 160 to 175 meters;
- The maximum possible total height of a turbine can reach 260 meters.

To ensure the transmission of the generated electricity to the main grid, power transmission lines will be constructed to connect to the 110 kV substation in Valka, located near the planned wind farm. The exact location of the transmission lines will be determined during the development of the WTG and infrastructure layout. When planning the placement of the cable lines, Article 21 of the Energy Law will be considered, which stipulates that the installation of new energy supply commercial facilities should, as much as possible, utilize road land boundaries in accordance with the provisions of Article 18 of the Law "On Roads."

#### Compliance with the territorial plan

In the research area, which is located in Valka municipality, the Regulations for the Planning, Use and Building of the Territory of the Valka municipality's territorial plan (for the period from 2017 to 2027, with amendments in 2021)¹ are applicable. The planned wind farm area includes zones designated for the following uses: agricultural, forest, industrial construction, transportation infrastructure, and water territories. According to the Valka municipality's territorial plan, the construction of energy supply enterprises is permitted in agricultural, forest, industrial construction, and transportation infrastructure areas. The Regulations for the Planning, Use and Building of the Territory specify that when planning the placement of wind turbines, the requirements of the applicable regulatory acts must be followed.

#### Public Health and Safety

The most significant aspects that, under certain circumstances, may potentially cause considerable impacts or disturbances are noise, including low-frequency noise, the flickering effect, and environmental risks, all of which, along with other environmental aspects, will be assessed in detail within the framework of the environmental impact assessment.

3

<sup>&</sup>lt;sup>1</sup> https://geolatvija.lv/geo/tapis#document 22074

In Latvia, noise from wind turbines will generally be a minor environmental issue because the country has established sufficient minimum distances to prevent negative impacts. Specifically, wind turbines must be built no closer than 800 meters from residential or public areas, which means that even the loudest available wind turbine models will produce noise well below the limits set by regulations at this distance. As part of the environmental impact assessment, environmental noise levels will be evaluated in construction areas where environmental noise limits apply, and which are located up to 2 kilometers from the planned wind farm. Low-frequency noise levels will also be assessed in all residential buildings within 2 kilometers of the planned wind farm.

The flickering effect (also referred to as the "disco effect" or "shadow flickering") is caused by the movement of the rotor blades, which periodically block the sun and create moving shadows on the ground and the surfaces of various objects. The flickering effect's impact time limits are applied by considering the total flicker time produced by all wind turbines in a given construction area. In summary, the flicker effect in the area of any residential house must not exceed 30 minutes per day, and the total allowable impact time over the course of one year must not exceed 30 hours (assuming no cloud cover) or 8 hours (accounting for actual sunshine). The impact time of the flickering effect will be assessed in construction areas located up to 3 kilometers from the planned wind farm.

Although wind turbines are designed as safe and stable structures, wind turbines and wind farms are high-risk facilities that, in case of technical defects, improper operation and maintenance, or external factors, can cause accidents or emergencies. Therefore, potential accidents and risks associated with rotor blade icing, mechanical damage, lubrication system defects, and fires will also be assessed. During the preparation of the assessment, safety distances from wind turbines to sensitive areas will be calculated, and if necessary, measures will be identified to eliminate or reduce risks to acceptable levels.

# <u>Specially Protected Nature Territories and Impact on Natural Values</u>

A small part of the planned wind farm research area is located within the Specially Protected Nature Territories "Northern Vidzeme Biosphere Reserve," while approximately 1.4 km to the south of the research area's border is a state-protected landscape area, and about 2.0 km to the southwest from the research area's border is a microreserve and the Natura 2000 area "Bulvāra Riests." To the west of the research area, 2.0 km away within the Northern Vidzeme Biosphere Reserve, lies the "Burgas Meadows" nature reserve, and 6.91 km away is the "Seda Swamp" nature reserve. Additionally, 8.03 km away is the microreserve and Natura 2000 area "Igaunijas Riests" (see Figure 2). Surrounding the research area, there are protected natural areas such as microreserves established with the purpose of protecting specially protected species or habitats outside of specially protected natural areas. Annex 2 lists all protected species and habitats for which microreserves have been established within 10 km of the planned "Valka" wind farm research area (a total of 45 microreserves). According to the Nature Data Management System OZOLS, one specially Protected Tree, a common oak (Quercus Robur), is registered in the area of the proposed activity.

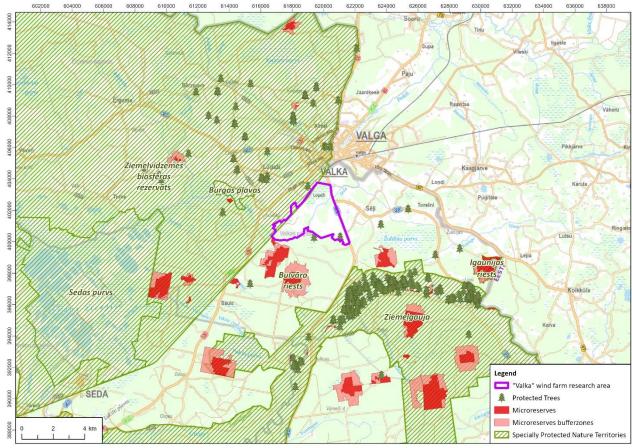


Figure 2. Specially Protected Nature Territories around the "Valka" wind farm

During the environmental impact assessment process, environmental and nature experts will conduct an in-depth study of the natural values found within the research area and its surroundings. They will assess the impact of the planned wind farm on these natural values and, if necessary, provide recommendations for mitigating or eliminating potential impacts.

### **Surface Water Bodies**

The area of the proposed activity is located within the Gauja River basin, where the Seda River, a state-significant water body (code 5454:01), is found. It is worth mentioning that the planned "Valka" wind farm area includes drained agricultural land.

# Landscape quality and cultural heritage

The impact of wind farms on the landscape is a significant aspect, especially in areas with natural or minimally altered landscapes. According to the Valka municipality's territorial plan and Regulations for the Planning, Use and Building of the Territory, there are designated scenic areas and scenic roads within the municipality. In a protected area like "Northern Gauja" (in Valka,

Vijciems, and Zvārtava parishes), construction or other activities that could obstruct views from publicly accessible viewpoints and scenic roads are prohibited<sup>2</sup>.

In the context of wind farm construction, an equally important aspect that is assessed during the environmental impact assessment process is the proposed project's impact on cultural heritage. The nearest cultural monument is located 950 meters from the research area in the town of Valka, which is a regionally significant cultural monument, and the historical site named "Vidzemes Teachers' Seminary" (No. 97).

When developing the environmental impact assessment report, the proposed activity's impact on the landscape quality of the Northern Vidzeme Lowland and the Seda Plain, as well as the cultural and historical values in the vicinity of the planned wind farm, will be evaluated.

# Contaminated Sites and High-Risk Facilities

According to the "Contaminated Site Management System," there are no potentially contaminated or contaminated sites within the research area. According to the Cabinet of Ministers Regulation No. 46 of January 21, 2021, "List of High-Risk Facilities," the nearest high-risk facility is the AS "VIRŠI-A" fuel station (Rīga Street 80, Valka, Valka municipality), which has been classified as a Category C facility. This facility is located approximately 1 km away from the research area.

The information provided in the application is true and complies with the requirements set forth in the regulatory acts.

Sincerely,
Member of the Board of SIA "EWE Neue Energien 1"

Arne Heeck

THIS DOCUMENT IS ELECTRONICALLY SIGNED WITH A SECURE ELECTRONIC SIGNATURE AND CONTAINS A TIMESTAMP

<sup>&</sup>lt;sup>2</sup> Valkas novada dome. 2014. *Valkas novada ilgtspējīgas attīstības stratēģija 2013.–2037. gadam*. Valka, Valkas novada dome. Pieejams https://www.valka.lv/lv/media/2114/download?attachment

Annex 1. Land parcels within the research area of the planned "Valka" wind farm

| No. | Cadastral parcel | Cadastral number | Property name            |
|-----|------------------|------------------|--------------------------|
| 1   | 94880100262      | 94880070032      | Jaunosīši                |
| 2   | 94880090003      | 94880090003      | Cerbuli                  |
| 3   | 94880090008      | 94880090006      | Lejas Ģērķi              |
| 4   | 94880090009      | 94880090006      | Lejas Ģērķi              |
| 5   | 94880090006      | 94880090006      | Lejas Ģērķi              |
| 6   | 94880090007      | 94880090006      | Lejas Ģērķi              |
| 7   | 94880090010      | 94880090010      | Liepkalni 1              |
| 8   | 94880090020      | 94880090019      | Liepkalni 2              |
| 9   | 94880090022      | 94880090019      | Liepkalni 2              |
| 10  | 94880090019      | 94880090019      | Liepkalni 2              |
| 11  | 94880090123      | 94880090035      | Dzelzceļš 162. km        |
| 12  | 94880090035      | 94880090035      | Dzelzceļš 162. km        |
| 13  | 94880100060      | 94880090058      | Kalnpilēnieši            |
| 14  | 94880100070      | 94880090061      | Jaunpilēnieši            |
| 15  | 94880090078      | 94880090061      | Jaunpilēnieši            |
| 16  | 94880090066      | 94880090066      | Bez nosaukuma            |
| 17  | 94880090069      | 94880090069      | Lauciņi                  |
| 18  | 94880090080      | 94880090080      | Vecsaulieši              |
| 19  | 94880090095      | 94880090081      | Kalnsaulieši             |
| 20  | 94880090082      | 94880090082      | Jaunsaulieši             |
| 21  | 94880090091      | 94880090090      | Buli                     |
| 22  | 94880090110      | 94880090110      | Stacija Lugaži           |
| 23  | 94880090111      | 94880090111      | Ceļš Ausekļi - Liepkalni |
| 24  | 94880090207      | 94880090111      | Ceļš Ausekļi - Liepkalni |
| 25  | 94880090083      | 94880090142      | Dzenīši 3                |
| 26  | 94880090081      | 94880090147      | Kalnsaulītes             |
| 27  | 94880090079      | 94880090148      | Paceplīši                |
| 28  | 94880090187      | 94880090187      | Dukāti                   |
| 29  | 94880100318      | 94880100001      | Bābernieki               |
| 30  | 94880100042      | 94880100001      | Bābernieki               |
| 31  | 94880100004      | 94880100003      | Lielkājas                |
| 32  | 94880100005      | 94880100005      | Dumpi                    |
| 33  | 94880100007      | 94880100007      | Rijsalas - 2             |
| 34  | 94880100008      | 94880100008      | Rijsalas - 1             |
| 35  | 94880100012      | 94880100012      | Saulstari                |
| 36  | 94880100090      | 94880100026      | Antiņi                   |
| 37  | 94880100039      | 94880100035      | Vecavēni                 |
| 38  | 94880100035      | 94880100035      | Vecavēni                 |
| 39  | 94880100036      | 94880100036      | Avēni                    |

| 40 | 94880100044 | 94880100044 | Zīlēni                  |
|----|-------------|-------------|-------------------------|
| 41 | 94880100049 | 94880100049 | Smēķi                   |
| 42 | 94880100048 | 94880100052 | Vēverzemnieki           |
| 43 | 94880100157 | 94880100052 | Vēverzemnieki           |
| 44 | 94880100150 | 94880100052 | Vēverzemnieki           |
| 45 | 94880100055 | 94880100055 | Sedaskalni              |
| 46 | 94880100058 | 94880100058 | Karjers                 |
| 47 | 94880100059 | 94880100059 | Valsts brīvā zeme (ZET) |
| 48 | 94880100257 | 94880100090 | Sedieši                 |
| 49 | 94880100091 | 94880100120 | Sedaskalni              |
| 50 | 94880100056 | 94880100120 | Sedaskalni              |
| 51 | 94880100152 | 94880100177 | Autoceļš P24            |
| 52 | 94880100177 | 94880100177 | Autoceļš P24            |
| 53 | 94880100245 | 94880100245 | Bez nosaukuma           |
| 54 | 94880100255 | 94880100255 | Sedaskalni              |
| 55 | 94880100319 | 94880100320 | Kramiņi                 |
| 56 | 94880100317 | 94880100320 | Kramiņi                 |
| 57 | 94880100261 | 94880100331 | Svīres                  |
| 58 | 94880100329 | 94880110072 | Sedas upe               |
| 59 | 94880130031 | 94880130007 | Ciņi                    |
| 60 | 94880100088 | 94880140043 | Kaičupes                |
|    |             |             |                         |

Annex 2. Microreserves located within a 10 km radius of the "Valka" wind farm research area

| No. | Name  | Number of microreserves |
|-----|---|-------------------------|
| 1   | Western capercaillie Tetrao urogallus               | 11                      |
| 2   | Riverside forest habitat                            | 8                       |
| 3   | The white-backed woodpecker Dendrocopos leucotos    | 4                       |
| 4   | Eurasian three-toed woodpecker Picoides tridactylus | 4                       |
| 5   | Broadleaf forest habitat                            | 3                       |
| 6   | Biotree   | 2                       |
| 7   | Lesser spotted eagle Clanga pomarina                | 2                       |
| 8   | Primary forests in river meander bends              | 2                       |
| 9   | Osprey Pandion haliaetus                            | 2                       |
| 10  | Cedar Bark Beetle Ceruchus chrysomelinus            | 1                       |
| 11  | Cinnamon bracket Hapalopilus croceus                | 1                       |
| 12  | Hermit beetle Osmoderma eremita                     | 1                       |
| 13  | Black stork Ciconia nigra                           | 1                       |
| 14  | Black alder swamp                                   | 1                       |
| 15  | Mixed coniferous-deciduous forest habitat           | 1                       |
| 16  | Flattened Clubmoss Diphasiastrum complanatum        | 1                       |