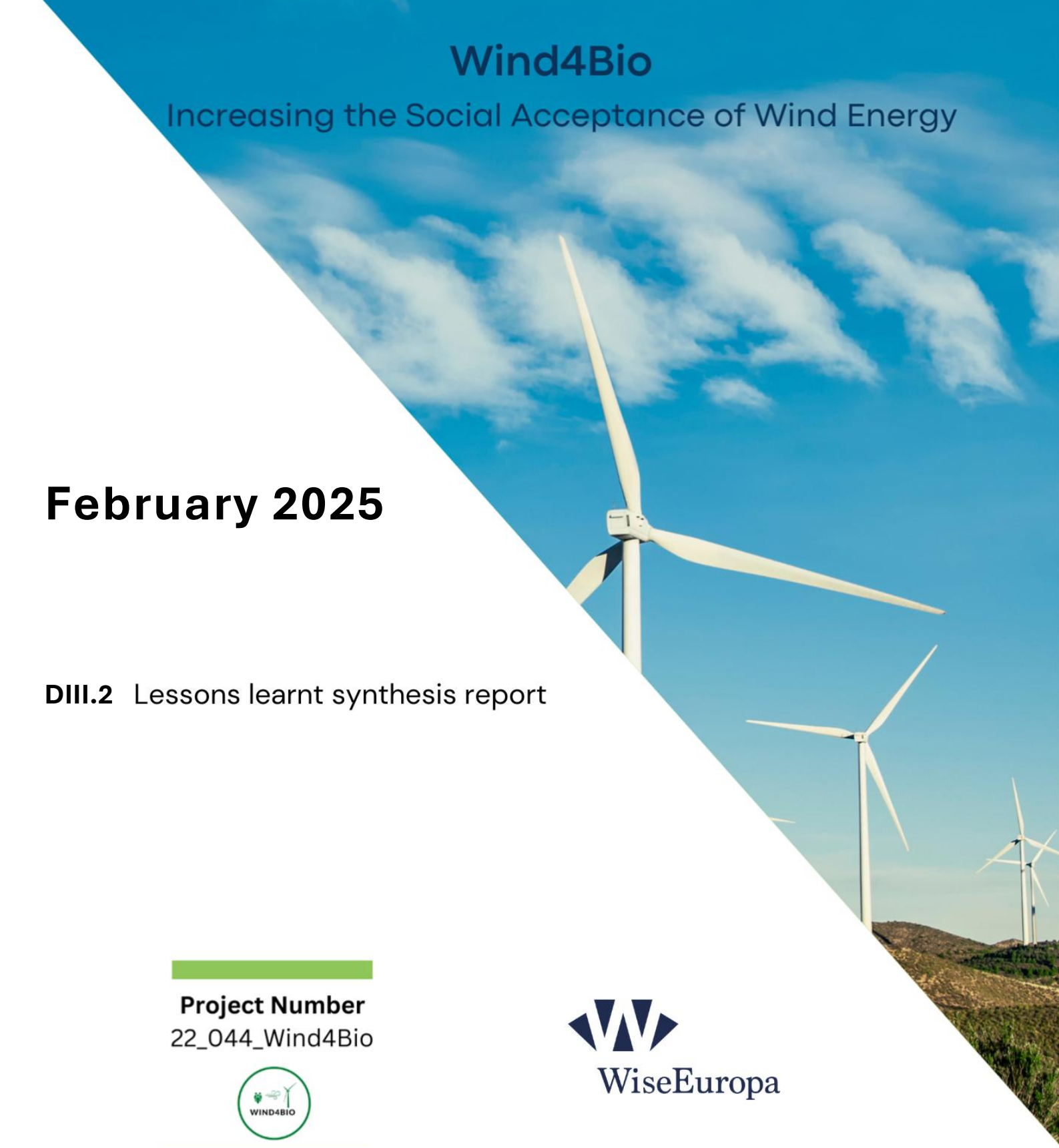
Wind4Bio

Increasing the Social Acceptance of Wind Energy



February 2025

DIII.2 Lessons learnt synthesis report

Project Number
22_044_Wind4Bio

WIND4BIO

WiseEuropa

Supported by:

Federal Ministry
for Economic Affairs
and Climate Action

European
Climate Initiative
EUKI

on the basis of a decision
by the German Bundestag

Supported by:

Federal Ministry for Economic Affairs and Climate Action

on the basis of a decision by the German Bundestag

European Climate Initiative EUKI

Wind4Bio

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Project: Wind4Bio

Activity: A III.2

This project is part of the European Climate Initiative (EUKI). EUKI is a project financing instrument by the German Federal Ministry for Economic Affairs and Climate Action (BMWK). The EUKI competition for project ideas is implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. It is the overarching goal of the EUKI to foster climate cooperation within the European Union (EU) in order to mitigate greenhouse gas emissions.

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Executive Summary

This report aims to collect, compile and present all the main discussion points and takeaways of the three workshops organised in Greece, Latvia, and Poland. The workshops gathered business representatives to discuss their approach and awareness regarding the importance of biodiversity throughout the lifecycle of wind power projects. Additionally, the workshops presented the outcomes of the project, specifically the Code of Conduct, as a contribution to promoting a more responsible approach by businesses in relation to biodiversity.

The document is structured in four main sections.

- **Section 1** introduces the aspect of biodiversity importance within private sector and provides a brief overview of Activity AIII.2 within the framework of the Wind4Bio project.
- **Section 2** presents the three thematic workshops held in Greece, Latvia, and Poland, focusing on the topics discussed and the lessons learnt from each workshop.
- **Section 3** discusses in a comparative way the lessons learnt and recommendations from each workshop.
- **Section 4** provides recommendations for biodiversity protection and private sector engagement in wind energy projects.

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1. Introduction

The impact of wind energy on biodiversity has become increasingly evident in recent years, highlighting the need for a more comprehensive approach to environmental preservation. As the wind energy sector continues to expand, it is crucial to integrate biodiversity considerations throughout the entire lifecycle of wind projects, from planning and construction to operation and decommissioning. A science-based and transparent strategy can help investors and operators not only mitigate ecological risks but also enhance social acceptance, which is essential for the industry's sustainable growth.

Wind4Bio aims to facilitate dialogue among key stakeholders involved in or affected by wind energy. To this end, we have organized and continue to plan a series of open-access public workshops, bringing together operators, public authorities, and civil society representatives. These workshops will serve as a platform for industry professionals to exchange best practices and discuss challenges related to incorporating biodiversity considerations into their strategies.

Beyond social acceptance, addressing biodiversity concerns is becoming an economic necessity. The growing regulatory framework, particularly within the EU, imposes new obligations on financial institutions, which in turn may restrict funding for companies that fail to properly integrate biodiversity into their business models. To support the industry in this transition, the Wind4Bio consortium has developed a Code of Conduct, which outlines key principles for incorporating biodiversity into corporate strategies. Applying these principles represents a critical first step in aligning business practices with sustainability goals and ensuring long-term viability in the evolving energy landscape.

1.1 Activity III.2

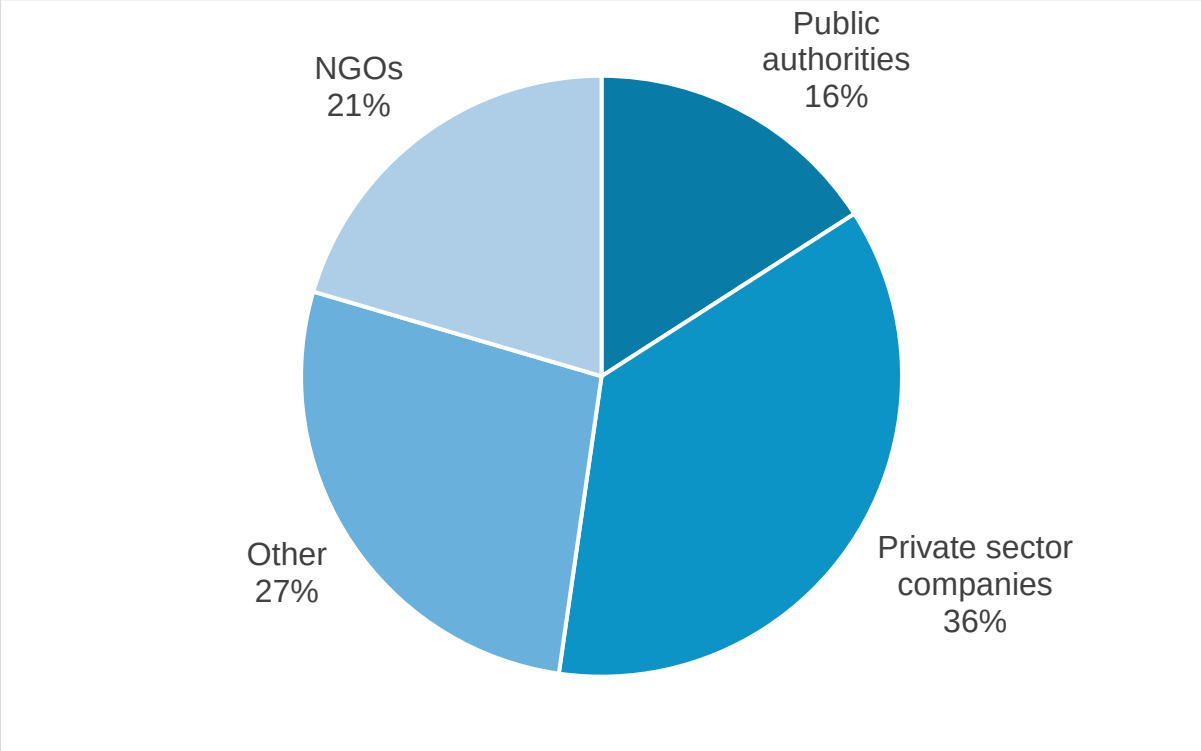
A series of workshops was organized with the participation of wind energy businesses aiming to improve their environmental and biodiversity protection standards, along with representatives from industry associations. During these workshops, case studies and best practices for ensuring biodiversity protection throughout wind farm deployment and operation were presented. Additionally, the Code of Conduct, developed within the framework of AIII.1, was introduced. Initiatives to enhance public acceptance of wind farms, such as organized visits to model wind farms and the establishment of habitat rehabilitation funds for post-decommissioning restoration, were also explored.

Through these workshops, businesses in the wind energy sector will be made more aware of effective biodiversity mitigation measures and will be better equipped to implement them. In the long term, a greater number of businesses are expected to adopt the Code of Conduct, contributing to an improved environmental reputation for the sector and increased public approval of wind energy projects. Furthermore, several businesses are anticipated to initiate actions demonstrating their commitment to biodiversity protection.

2. Thematic Workshops

Raising awareness and enhancing the capacity of wind energy businesses to implement biodiversity protection measures throughout the entire lifecycle of wind projects was a key focus of the Wind4Bio workshops. In this context, the series of workshops in Greece (organised by UPAT with PROMEA's support), Latvia (organised by Green Liberty) and Poland (organised by Wise Europa), brought together representatives of the wind industry, public authorities, civil society representatives, non-governmental organizations (NGOs) (Figure) to present outcomes of the project, in particular the Code of Conduct as our contribution to the more responsible approach of businesses to the biodiversity. Additionally, the workshops provided a platform to discuss participants' approach and awareness of the importance of biodiversity in the lifecycle of project and whether (and if so, what were they) they have already undertaken any actions aimed specifically at addressing the risks for biodiversity.

Figure 1. Stakeholder groups that participated in the three thematic workshops of Activity AIII.2



2.1 Thematic Workshop in Greece

The thematic workshop on enhancing collaboration between civil society and administrative authorities in Greece was organised by the University of Patras (UPAT) with the support of PROMEA on the 11th of December 2024. The meeting took place at the University of Patras Conference & Cultural Center on site but also virtually, using ZOOM.

2.1.1 Participants

The workshop was organised in hybrid format bringing together 22 participants (8 on site and 14 remotely), including representatives from public authorities (7), private sector companies (5) and unspecified attendees (10).

2.1.2 Presentations

The workshop started with introduction of the Wind4Bio project, its goal and objectives, giving emphasis on the conducted deliverables. The participants followed with presenting other projects such as Green4HEAT, CLIMATE and INTERREG EUROPE, in which partners participate towards EU regions' environmental and socioeconomic resilience to climate change, accelerate the uptake of green heating and cooling solutions across EU territories. Another participant then presented the BIOWIND project, that acts towards the increase of social acceptance for wind energy in EU regions through environmental and community-based planning. He also showed the wind energy status in EU, Greece and the Region of Western Greece and discussed the reasons for low acceptance of wind energy and the possible benefits of a broader social acceptance for the case of Greece, highlighting the necessity of cooperation between public authorities, civil societies and private wind energy sector.

The last presentation was given by a representative of PROMEA, who discussed the Code of Conduct which can be seen as a Guide to wind energy projects. He outlined key principles: environmental responsibility, continuous improvement, transparency and sustainability, before delving into the Environmental Impact Assessment (EIA) process. He also highlighted the importance of systematic documentation-reporting that would help the stakeholder engagement and public accessibility, training and awareness through capacity building and awareness programs, as well as legal compliance to national & EU regulations, community engagement, internal audits and corrective actions.

The workshop moved according to the agenda into the discussion part, in which the participants had a chance to share their opinions regarding the current status of wind energy in Greece, the ways of increasing social acceptance and the role of private sector companies towards this target.

The participants emphasized the importance of local civil societies to be heard and be taken under consideration during the phases of a wind farm projects. It was highlighted that local communities should be taken into consideration more by the private companies rather than being underestimated. The current lack of such as mentality results in misinformation of local residents which, eventually, lead them to negative reactions and their opposition to wind energy. There should be a continuous update towards local communities for the number of (wind energy) projects that are planned or being operated in each area. Moreover, even though there is already an existing public online platform that facilitates the consultations during the Environmental Impact Assessments such as the Electronic Environmental Register, the Wind4Bio online platform could be used and act complementary in the sense that it will allow a dialogue between the different parties after the construction phase of a wind farm. In this way, stakeholders can gather information about specific wind farms and discuss in depth about the biodiversity risks and concerns. On the other hand, private companies should adhere to the environmental regulations with no deviations as it is foreseen in the EIA so local communities increase their acceptance towards wind energy. Additionally, the wind energy business sector agreed that the Code of Conduct is an outcome that could improve the social acceptance of wind energy.

Additionally, the financial benefits that private companies are obligated to give to the Green Fund, to the local communities and the municipalities are actually not being efficiently absorbed for the sake of local residents. In this way, the positive outcome of wind projects is not very clear to the local communities and that's why they continue to oppose to forthcoming projects. It was stated that municipalities should focus on distributing financial benefits that private companies give to local residents for various reasons to public works (i.e. playgrounds, building houses, repairing roads) thus actually helping local communities in their everyday life. Therefore, in order to increase social acceptance, (i) proper channels of information are necessary so that there is no misinformation about wind and renewable energy, (ii) municipalities should efficiently distribute the financial benefits to public works that would benefit local communities mostly in the short-run, (iii) all stakeholders should understand their

role and that there is an imperative need to increase renewable energy in order to achieve sustainability and the EU goals for 2050 in a national level.

2.1.3 Lessons Learnt

Enhancing communication with civil society

Local communities are often vulnerable when it comes to information about renewable energy, particularly wind energy. To prevent misinformation that could lead to opposition from civil society against upcoming projects, it is essential to establish better and more direct communication channels. These channels can positively influence public perception and foster understanding. Additionally, local authorities and private companies should properly inform communities about upcoming projects, ensuring they are fully aware of planned actions and their potential impact. On top of that, private companies could follow a code of conduct to enhance social acceptance by engaging with local communities consistently and adhering to the same principles throughout all phases of a wind energy project.

Online consultation-communication tools

To foster a safe and open environment for civil society, one in which people feel comfortable with new projects like wind energy, effective communication can be achieved through online consultation and communication tools. These tools can help present new or existing wind parks, inform the public about potential (environmental) risks identified by authorities or private companies, and provide a structured platform for addressing civil society's concerns in a more efficient manner.

Transparent distribution of financial benefits

The financial benefits generated by nearby wind parks should be allocated by local municipalities in a clear and transparent manner. When combined with better and continuous communication with civil society, this transparency can help increase social acceptance of such projects.

2.2 Thematic Workshop in Latvia

On the 4th of February 2025, Green Liberty organised the Latvian thematic workshop on biodiversity within private sector. The meeting took place at the Ltd. Enefit office in Riga.

2.2.1 Participants

The Latvian workshop was held in a hybrid format, bringing together 13 participants (8 attending in person and 14 joining remotely), including representatives from private sector companies (8) and regional NGOs (5).

2.2.2 Presentations

The workshop focused on discussing the Wind4Bio Code of Conduct, as well as the necessity of nationally adapted good practice guidelines for minimizing the impact of wind parks on the natural environment.

The meeting began with a brief introduction to the Wind4Bio project, which was followed by a presentation on the Code of Conduct. After the presentation, the letter of support was introduced, emphasizing that reaching a consensus would signify the wind-energy-companies' recognition regarding the importance of minimizing and monitoring the potential negative impacts of wind parks throughout their lifecycle. It was also highlighted that the best available knowledge and technologies should be applied and cooperation with local communities and stakeholders should be strengthened.

Following this, feedback was requested from the wind energy sector regarding the main principles of the Code of Conduct. A discussion was then facilitated on whether the development of national good practice guidelines was necessary at that moment and whether a joint project between environmental organizations and wind energy companies should be initiated. The aim and potential content of such a development process were further examined, along with considerations regarding project administration and funding.

The key discussion points were gathered beforehand during a steering committee meeting, which involved representatives from NGOs, environmental impact assessment (EIA) conductors, academia, and public sector institutions. Participants included organizations such as Green Liberty, the Latvian Fund for Nature, the Worldwide Fund for Nature Latvia, the Latvian Ornithological Society, the Association of Latvian Organic Agriculture, the University of Latvia Institute of Biology and LLC Estonian, Latvian, and Lithuanian Environment, as well as the Nature Conservation Agency.

At the conclusion of the meeting, two additional project topics were proposed: the organization of a joint communication campaign and the development of a program to improve the competencies of nature experts in evaluating wind park projects.

2.2.3 Lessons Learnt

Improving the Wind4Bio Guidelines

The Wind4Bio Code of Conduct received general support for its principles from wind energy companies, public institutions, and environmental organizations. However, discussions arose regarding its development process and applicability in national contexts. While the Code offers a solid framework for biodiversity protection, it was primarily developed by one partner of the Wind4Bio consortium with others contributing only through comments. As a result, while it touches on local issues, it primarily follows a more general approach. For the Code to be effective and widely adopted, a more collaborative process involving diverse stakeholders, such as species and habitat experts, government agencies and industry representatives, would be necessary. Despite these limitations, the Code can serve as a useful reference for developing national good practice guidelines, as it comprehensively covers all phases of wind park development and includes key biodiversity protection measures.

National Good Practice Guidelines

As numerous wind park projects are already in the planning and evaluation stages, the need for the national good practice guidelines is quickly diminishing. Therefore, if the decision is made to move forward with them, work should begin immediately. The focus should shift from site selection to impact mitigation during planning, construction, operation, and decommissioning. A major concern is the non-binding nature of these guidelines, which could limit their enforcement. However, informal adherence could be encouraged through investor expectations and public scrutiny. To ensure credibility, these guidelines should be developed with input from all key stakeholders and their funding should remain independent of industry associations to maintain neutrality.

Wind energy companies have expressed interest in contributing to the development of national guidelines. They emphasize that the guidelines should serve as an informative resource for both companies and the public, outlining key considerations to minimize negative impacts and demonstrate developers' commitment to responsible planning. However, they believe the guidelines should remain voluntary, without imposing additional legal obligations beyond existing regulations. They also stress the importance of highlighting clear benefits for companies, especially if NGOs are the primary advocates for the guidelines. Additionally, they suggest creating a roadmap for the development process, including communication strategies to effectively promote the guidelines.

Future collaboration and initiatives

Both environmental organizations and wind energy companies recognize the importance of ongoing dialogue and cooperation. A long-term communication campaign, both online and on-site, was discussed as a necessary step to improve public perception of wind energy. While environmental organizations have already engaged in similar efforts, the effectiveness of such campaigns depends on the messages conveyed by each party. It was emphasized that environmental NGOs should not act as public relations representatives for wind energy development but should instead focus on identifying and addressing risks, including responding to societal concerns.

Strengthening expertise

To ensure the effectiveness of EIAs in wind energy projects, it is crucial to have well-qualified experts with both technical and ecological knowledge. However, challenges arise from a lack of expertise in technological impact minimization and concerns about expert reliability, including the potential for corruption. These issues highlight broader systemic problems, such as the absence of a strong certification and supervision mechanism and the limited capacity of the Nature Conservation Agency to oversee expert assessments. To address this, efforts are underway to develop a certification and supervision system for nature experts. Additionally, there is an opportunity for a joint project aimed at improving expert competencies, provided it remains impartial and scientifically grounded, involving both natural scientists and technical experts from the wind energy sector.

2.3 Thematic Workshop in Poland

The workshop took place on Thursday, 9th of January 2025 and was hosted by WiseEuropa at Mokolove Restaurant in Warsaw. Additional workshop was held online with the representative from OX2, who, due to last-minute circumstances beyond her control, was unable to attend the in-person meeting.

2.3.1 Participants

There were 9 attendees in total, with 3 representatives from private sector companies (banking and energy sectors), 4 representatives from NGOs and 2 unspecified attendees (Student Scientific Energy Club from the Warsaw School of Economics (Szkoła Główna Handlowa),

2.3.2 Presentations

The workshop consisted of both, presentation and discussion among participants, which were invited to exchange perspectives on the biodiversity aspects of their enterprises. Presented by a representative of WiseEuropa, first part of the meeting emphasized an interplay between wind energy development and biodiversity preservation. The need for a comprehensive, whole-lifecycle approach (including planning, construction, operation, and decommissioning) was emphasized to effectively address biodiversity concerns. The presenter also highlighted practical measures such as avoiding ecologically sensitive zones, employing risk-reduction tools to safeguard wildlife, scheduling construction to steer clear of critical breeding seasons, monitoring operational impacts and restoring habitats after decommissioning.

Business representatives were also introduced to the consortium's Code of Conduct, outlining how it supports their commitment to biodiversity preservation by providing practical guidance tailored to each phase of the wind farm lifecycle. This self-regulatory framework not only assists companies in adopting sustainable practices and reducing environmental impacts but also emphasizes the importance of engaging local communities and public authorities in discussions to ensure transparency, effectiveness and to prevent greenwashing.

Following the presentation, an open discussion provided a platform for participants to share their insights and experiences on the multifaceted challenges of integrating biodiversity aspects into wind energy projects. The participants agreed that a proactive, preventive approach is essential, advocating for measures that address biodiversity concerns upfront, with compensation reserved only as a last resort. For instance, one example highlighted during the discussion, was a company's podcast episode described how the community addressed biodiversity concerns by building beehives when bees settled on the solar farm. This initiative is an example of the proactive steps companies can take to foster biodiversity and sustainability.

Participants also emphasized the critical role of education in this context, noting that many private companies still lack a clear understanding of biodiversity. In contrast, banks, familiar with relevant regulatory frameworks, could play a pivotal role in spreading knowledge and promoting best practices. Additionally, participants agreed on the shortage of biodiversity experts in the market, as well as the lack of university programs focused on biodiversity. The need for enhanced education extends to the public along with misinformation and miscommunication often fuel local opposition to wind energy projects. Additionally, the

discussion tackled the challenge of greenwashing, pointing out that without standardized biodiversity indicators, measuring and reporting progress remains difficult compared to more straightforward metrics like emissions. Concerns were also raised about public scepticism and resistance, particularly as early adopters of renewable energy have already adopted it, leaving the group of critics still hesitant to embrace the transition. Overall, the dialogue underscored the necessity for a comprehensive strategy that combines preventive action, robust education, transparent communication and effective risk management to foster both environmental sustainability and social acceptance in the wind energy sector.

2.3.3 Lessons Learnt

Including biodiversity into strategies

Operators in the wind energy sector should focus on preventive measures to protect biodiversity, using compensation only as a last resort. Companies can reduce negative impacts on biodiversity and enhance the social acceptance of their projects, by executing strategies such as avoiding high-sensitivity zones and using risk-reducing tools throughout the project lifecycle.

Development of education

Education is crucial for advancing biodiversity practices in the wind energy sector. Since many companies lack a comprehensive understanding of biodiversity, banks (already familiar with the relevant regulations) can play a pivotal role in informing both their clients and the wider industry. This enhanced awareness will help businesses to incorporate biodiversity considerations into their operations more effectively and comply with environmental standards. In parallel, misinformation about wind energy's environmental effects often sparks community opposition. Reaching out to local communities early, offering clear and accurate information and directly addressing their concerns, can aid in buildingtrust and support for improving projects. Maintaining transparency is essential to reducing resistance and promoting social acceptance.

Unified and transparent approach

Addressing biodiversity concerns effectively requires cross-sector collaboration and an additional approach to raising awareness. Initiatives like the Code of Conduct promote self-regulation and knowledge-sharing, serving as a foundation for broader industry engagement. This unified strategy fosters consistent and impactful biodiversity practices across the

renewable energy sector. To avoid greenwashing, the establishment of standardized biodiversity indicators is essential, as they enable the sector to measure and demonstrate genuine efforts to preserve biodiversity with transparency and accountability for their practices. Moreover, strong regulatory support from governments, through incentives for sustainable practices and penalties for non-compliance, will motivate companies to adopt biodiversity friendly strategies, ensuring long-term environmental benefits.

3. Comparative Analysis & Lessons Learnt

3.1 Comparative Analysis

This section provides a summative assessment of all three workshops conducted, deriving from all key topics discussed during the regional meetings hosted in Greece, Latvia, and Poland.

Social acceptance and stakeholder engagement

A recurring theme across the workshops was the importance of engaging local communities in wind energy projects. Participants stressed that private companies should prioritize transparent communication with local civil societies and ensure that communities are well-informed about planned developments. Misinformation was identified as a key factor in public opposition to wind energy, reinforcing the need for continuous updates and accessible consultation mechanisms. While existing platforms provide formal channels for consultation, participants proposed that the Wind4Bio online platform could complement these efforts by facilitating ongoing dialogue between stakeholders beyond the construction phase.

Code of Conduct and Good Practice Guidelines

Another key discussion point was the Wind4Bio Code of Conduct and the necessity for national good practice guidelines. The workshops examined how the Code of Conduct serves as a guide for responsible wind energy development, outlining principles such as environmental responsibility, transparency, and continuous improvement. While the Code was generally well received, it was noted in the Latvian workshop that the development of the Code was primarily led by one partner, with other stakeholders contributing only through comments. As a result, while a solid framework for biodiversity protection is provided, the approach remains largely general. Participants emphasized the need for a more inclusive and collaborative process in developing national guidelines, ensuring that they reflect country-specific challenges and solutions.

Biodiversity considerations and preventive measures

The workshops underscored the necessity of integrating biodiversity protection into wind energy planning. Presenters highlighted best practices, such as avoiding ecologically sensitive

zones, implementing risk-reduction tools, and scheduling construction outside critical breeding seasons. Business representatives recognized the importance of a proactive approach, advocating for preventive measures rather than relying solely on compensation. Participants also noted a significant shortage of biodiversity experts in the market and a lack of university programs focused on biodiversity.

Financial transparency and distribution of benefits

Another critical discussion point was the financial benefits allocated to local communities by private companies. Participants expressed concerns that these funds are not always efficiently utilized for the benefit of local residents, leading to continued opposition to wind projects. It was suggested that municipalities should ensure these financial resources are directed towards public infrastructure projects, such as playgrounds, housing, and road repairs, to provide tangible benefits to communities and improve social acceptance.

Future collaboration and knowledge sharing

The workshops highlighted the need for ongoing collaboration between environmental organizations, the wind energy sector, and public institutions. In the Latvian workshop, the participants proposed initiatives such as joint communication campaigns and capacity-building programs for biodiversity experts. Additionally, in the Polish workshop concerns were raised regarding the challenge of greenwashing in the renewable energy sector. As emphasised in Polish workshop, without standardized biodiversity indicators, it remains difficult to measure and report progress transparently. Establishing clear metrics and regulatory oversight could help address this issue and build public trust.

3.2 Lessons Learnt

Integrating biodiversity into wind energy strategies

Preventive measures should be prioritized to minimize the impact of wind energy projects on biodiversity, with compensation strategies used only as a last resort. Companies can enhance social acceptance by avoiding high-sensitivity zones and incorporating risk-reduction tools throughout the project lifecycle.

Enhancing communication with civil society

Local communities often lack reliable information about renewable energy projects, particularly wind energy. To prevent misinformation and opposition, it is essential to establish better communication channels between local authorities, private companies and civil society. Transparent and consistent engagement throughout all phases of a wind energy project fosters understanding and social acceptance. A code of conduct for private companies can further enhance trust and ensure adherence to best practices.

Utilizing online consultation and communication tools

Online platforms can offer a safe and structured environment for engaging with the public about wind energy projects. These tools might facilitate the presentation of new and existing wind parks, provide information on potential environmental risks and address community concerns in an efficient and transparent manner.

Transparent distribution of financial benefits

Financial benefits generated by wind parks should be allocated by local municipalities in a clear and transparent way. When combined with continuous and open communication with civil society, this transparency can increase public support and trust in renewable energy projects.

Strengthening expertise

In the Polish workshop, the participants pointed out that there is a lack of biodiversity experts as well as a shortage of university programs covering this topic. In Latvian workshop it was stated, that ensuring the effectiveness of EIAs in wind energy projects, requires highly qualified experts with both technical and ecological knowledge. However, challenges such as the lack of expertise in technological impact minimization, concerns about expert reliability (including potential corruption), and a broader shortage of biodiversity experts in the market pose systemic problems. Additionally, the shortage is a lack of university programs specifically focused on biodiversity further limits the availability of qualified professionals.

4. Recommendations

This chapter outlines key recommendations for improving biodiversity protection and private sector engagement in wind energy projects. It highlights strategies for stronger collaboration and greater transparency to ensure responsible project development.

Enhancing public awareness and education

Education is crucial for promoting biodiversity-friendly wind energy practices. Many companies lack comprehensive knowledge of biodiversity regulations and misinformation often fuels community opposition. Early engagement with communities, clear and accurate communication, and transparency are essential to building trust and reducing resistance.

Encouraging long-term collaboration and communication

Ongoing dialogue between environmental organizations, wind energy companies and the public is necessary to improve perceptions of wind energy. A long-term communication campaign, both online and on-site, can help address concerns and clarify the environmental impact of wind projects.

Strengthening regulatory support for biodiversity protection

Government incentives for sustainable practices and penalties for non-compliance can encourage companies to adopt biodiversity-friendly strategies. Regulatory support will help ensure that biodiversity considerations remain a priority in wind energy development, leading to long-term environmental benefits.