

Constitutional aspects of ecological safety in relation to offshore wind farms in the British and Polish legal systems

1. Introduction

The current development of renewable energy law (including, in particular, that concerning offshore wind power plants) requires the provision of adequate legal regulations allowing, on the one hand, for the greatest possible support for the planned investments and, on the other hand, for the maximum possible protection of the environment.¹ In this context, it is important to ensure an appropriate level of constitutional–legal environmental security (both in the Constitution itself and in the laws detailing it). In turn, the development of the relevant normative regulations entails the necessity of their continuous optimisation (i. e., also with the use of relevant models of foreign law). Therefore, the aim of this article will be to present selected aspects of constitutional–legal environmental protection in the scope of offshore wind farm investments in the Polish legal system and the British legal system, which constitutes a valuable source of inspiration *de lege ferenda*.

2. The relevance of offshore wind energy in the modern legal commerce

2.1 The international scope of offshore wind energy

Investment in offshore wind farms (hereafter: OWFs; in UK law, offshore wind farm: OFW) is an extremely rapidly growing branch of the energy sector. Technically and economically, offshore energy has already been subjected to quite a rich analysis in

1 See, for example, H.T. Anker, B.E. Olsen, A. Rønne, Legal systems and wind energy. A comparative perspective, Copenhagen 2008, pp. 293–316; P. Crossley, Renewable energy law. An international assessment, Cambridge 2019, pp. 250–264; A. Kałużny, W. Morawski, Taxation of assets used to generate energy: in the context of the transformation of the Polish energy sector from coal energy to low-emission energy, *Energies* 2021, vol. 14, iss. 15, article 4587, pp. 1–18; T.A. Rule, Solar, wind and land. Conflicts in renewable energy development, Abingdon-New York 2014, pp. 1–18; M. Serowaniec, Sustainable development policy and renewable energy in Poland, *Energies* 2021, vol. 14, iss. 8, article 2244, pp. 1–8.

science.² At this point, however, it is worth noting that the ever-growing potential of offshore wind is due to two circumstances in particular: firstly, OFWs allow the production of clean and renewable energy, and secondly, they are able to provide a relatively secure and stable generation profile (which is particularly relevant in relation to many less predictable renewable energy sources (hereafter: RES)).

Offshore wind power is a relatively young form of energy generation compared to conventional sources. The first OWF was established in 1991 in Denmark (the Vindeby farm) and consisted of 11 wind turbines with a unit capacity of 0.45MW. It should be noted that in 2009–2010 the average power of a single unit was about 3MW (and thus considerably more than the aforementioned first OWF), while currently (mid-2022), turbines with a unit power of 15MW are being commissioned for testing. Moreover, it is worth noting that a significant increase in the total installed OWF capacity has been noticeable since 2006. At that time, it amounted to 801 MW, and it continued to increase with each subsequent year. In 2010, the total capacity exceeded 3000 MW, while in 2015 it was over 11 GW. As at the end of 2021, the total installed capacity of OWFs worldwide is estimated at around 28 GW. The development of OWFs across regions is significantly diverse. Asian countries, especially China, started to develop the OWF somewhat later but are currently approaching the size of the installed capacity in Europe. At the same time, it should be noted that China has increased its installed capacity in this source by almost 170%, reaching almost 17 GW in 2021. In contrast, European Union countries have installed just over 3 GW in 2021. In contrast, the total installed capacity in terms of OWFs in 2021 was around 28 GW in Europe and around 27 GW in China.³

The future of offshore wind development seems extremely promising. Globally, the total installed capacity may amount to some 270 GW by 2030, while in 2050 it is expected to be as high as 2000 GW. Some forecasts indicate that Asian countries could have as much as 40% of all installed OWF capacity by 2050. Europe, on the

2 See, for example, M.I. Blanco, *The economics of wind energy*, *Renewable and Sustainable Energy Reviews* 2009, vol. 13, Iss. 6–7, August–September 2009, pp. 1372–1382; M.D. Esteban, J.J. Diez, J.S. López, V. Negro, *Why offshore wind energy?*, *Renewable Energy* 2011, vol. 36, iss. 2, pp. 444–450; R. Green, N. Vasilakos, *The economics of offshore wind*, *Energy Policy* 2011, vol. 39, iss. 2, pp. 496–502; B. Snyder, M.J. Kaiser, *Ecological and economic cost-benefit analysis of offshore wind energy*, *Renewable Energy* 2009, vol. 34, iss. 6, pp. 1567–1578.

3 See, for example, H. Díaz, C.G. Soares, *Review of the current status, technology and future trends of offshore wind farms*, *Ocean Engineering* 2020, vol. 209, article 107381, pp. 1–4; J.K. Kaldellis, D. Zafirakis, *The wind energy (r)evolution: a short review of a long history*, *Renewable Energy* 2011, vol. 36, iss. 7, pp. 1887–1901; P. Rapacka, *15 MW wind turbines are the present. Vestas with prototype ready for testing* <https://globenergia.pl/15-mw-owe-turbiny-wiatrowe-to-terazniejszosc-vestas-z-prototypem-gotowym-do-testow/> (accessed 30 August 2022); WindEurope, *Report Offshore wind in Europe – key trends and statistics – years 2016–2020*, <https://windeurope.org/intelligence-platform/reports/> (accessed 30 August 2022).

other hand, is expected to have around 32% of the total resources (640 GW) in the future. North America is next in terms of installed capacity by 2050, with an expected 18%. Latin America is next with 6%, followed by the Pacific region with 4% and Africa and the Middle East with 2% each.⁴

2.2 Offshore wind energy in Europe and the United Kingdom

In Europe, UK is the leader in terms of offshore wind capacity installed in 2021. In the UK, the total installed capacity of OFWs is currently around 12700 MW, with 2317 MW installed in 2021 alone. This is followed by Germany with around 8000 MW, the Netherlands with 3000 MW, Denmark with 2000 MW and Belgium with 2000 MW.⁵

Referring to the legal regulations on OFW investments in the UK, it is worth emphasising initially that they have been developing for much longer than the analogous standards under Polish law. Indeed, the first OFWs were already erected in the UK in 2000. The number and capacity of new installations is also constantly increasing. What is more, further dynamic growth is planned for future years.⁶ According to statistics from 2021, the UK has reached almost 12 GW of installed capacity in this respect. This is currently the highest on the entire European continent.⁷

4 Global Wind Energy Council, *Global Offshore Wind Report 2022*, <https://gwec.net/gwecs-global-offshore-wind-report/> (accessed 30 August 2022).

5 Windenergy, *Report Wind energy in Europe: 2021 Statistics and the outlook for 2022–2026*, <https://windeurope.org/intelligence-platform/product/wind-energy-in-europe-2021-statistics-and-the-outlook-for-2022-2026/> (accessed 30 August 2022).

6 See, for example, J. Aldersey-Williams, I.D. Broadbent, P.A. Strachan, *Analysis of United Kingdom offshore wind farm performance using public data: improving the evidence base for policymaking*, *Utilities Policy* 2020, vol. 62, Article 100985, pp. 1–9; E.G. Ochieng, Y. Melaine, S.J. Potts, T. Zuofa, C.O. Egbu, A.D.F. Price, X. Ruan, *Future for offshore wind energy in the United Kingdom: the way forward*, *Renewable and Sustainable Energy Reviews* 2014, vol. 39, pp. 656–665; P. Higgins, A. Foley, *The evolution of offshore wind power in the United Kingdom*, *Renewable and Sustainable Energy Reviews* 2014, vol. 37, pp. 600–611; P. Potisomporn, C.R. Vogel, *Spatial and temporal variability characteristics of offshore wind energy in the United Kingdom*, *Wind Energy* 2022, vol. 25, iss. 3, pp. 537–551.

7 See, for example, The Crown Estate, *Offshore wind operational report 2020*, p. 4, <https://www.thecrownestate.co.uk/media/3792/offshore-wind-operational-report-1.pdf>, (accessed 30 August 2022); National statistics: *Energy Trends UK, October to December 2021 and 2021*, p. 18 (<https://www.gov.uk/government/statistics/energy-trends-march-2022>; accessed 30 August 2022).

2.3 Offshore wind energy in the Republic of Poland

In Poland, OWFs have not been built so far, despite the fact that the first decisions to erect artificial islands, which initiated the investment process, were already issued in 2011–2012. One of the key strategic legal acts concerning the energy sector, the National Energy and Climate Plan for 2021–2030, assumes that the first OWF will be commissioned in 2025, while by 2030 the total offshore installed capacity will be 3.8 GW. Moreover, by 2040, there is expected to be 8 GW of capacity.⁸ In turn, according to another important energy strategy act (namely, the Energy Policy of Poland until 2040) the offshore wind goal for 2050 is to achieve 11 GW of installed capacity.⁹

Currently, there are eight OWF projects under development in Poland, which are being implemented by five RES entities. It should be noted that the largest planned wind farm is the Baltica 2 project, implemented by the Polish Energy Group (hereinafter: PGE) in cooperation (in the form of a joint venture, owning 50% of shares each) with one of the world's offshore industry tycoons: the Danish entity Orsted. The total capacity of the Baltica 2 project is to be around 1498 MW. The Baltica 2 project is scheduled to be operational in 2027. The joint venture between PGE and Orsted is also planning to develop the Baltica 3 project, which is estimated to have a capacity of about 1045 MW. It is also worth mentioning the Baltica 1 project (implemented independently by PGE), which has already received technical conditions for connection to the transmission grid, with a capacity of up to 896 MW. This project is scheduled to be commissioned after 2030.¹⁰

Another of the very important OWF projects is the investment being developed by Polski Koncern Naftowy Orlen (hereafter: PKN Orlen), which in turn has formed a joint venture with the Canadian entity Northland Power. The project to be developed, named Baltic Power, has an estimated total capacity of 1200 MW and is expected to start in 2024 and be commissioned in 2026.¹¹

Another investor in the Polish offshore sector, which has received permission to erect artificial islands and is already carrying out advanced work on the project, is Polenergia, combined with the Norwegian entity Equinor. The companies will develop two projects, the OWF Bałtyk II and the OWF Bałtyk III, with a total installed capacity of up to 1440 MW. The aforementioned Norwegian company

8 A. Brzezińska-Rawa, J. Goździewicz-Biechońska, Recent developments in the wind energy sector in Poland, *Renewable and Sustainable Energy Reviews* 2014, vol. 38, iss. C, pp. 79–87; Krajowy Plan na Rzecz Energii i Klimatu na lata 2021–2030 [National Energy and Climate Plan for 2021–2030], p. 94.

9 *Polityka Energetyczna Polski do 2040 roku* [Energy Policy of Poland until 2040], M.P. of 2021, item 264.

10 Offshore Programme, <https://pgebaltica.pl/program-offshore> (accessed 30 August 2022).

11 About the project, <https://www.balticpower.pl/o-projekcie/> (accessed 30 August 2022).

will also participate in Polenergia's third project, the Baltic I OWF, which has a maximum capacity of 1560 MW. The Bałtyk II and Bałtyk III OWF projects are expected to generate the first green energy in 2026.¹²

The Spanish–French company Ocean Wind has also decided to invest in the Polish Baltic Sea. This company will develop the BC-Wind project with a total capacity of up to 399 MW. Among the investors implementing OWF projects, the German entity RWE should be mentioned. RWE received support in the first phase of the OWF development under the FEW Baltic II project. The maximum capacity of this project will be up to 350 MW.¹³

3. The indispensability of ensuring ecological safety in the energy sector in regard to the dispute over Turów

The importance of guaranteeing adequate constitutional environmental safety mechanisms in energy law (and the consequences of failing to do so) can be seen in particular in the recent example of the so-called Turów dispute.

On 21 January 2020, the Polish Regional Director of Environmental Protection issued an approval administrative decision for the continued exploitation of deposits at the Turów brown coal mine until 2044. By this decision, the Minister of Climate and Environment extended the Turów coal extraction licence until 2026. The Czech Republic then referred the issue of extending the Turów coal extraction licence to the European Commission, claiming that Poland had breached EU law. In turn, the Commission found a breach of European Union law as a result of the omission of an environmental impact assessment.¹⁴

The Commission's decision, however, gave the Czech Republic the opportunity to bring an action against Poland before the Court of Justice of the European Union (hereinafter: CJEU), which they did on 26 February 2021. The legal basis for the action was Article 259 of the Treaty on the Functioning of the European Union.¹⁵ On 21 May, the CJEU issued an order granting the applicant's request, declaring the complaint to be well-founded. At the same time, the CJEU obliged Poland

12 Facts and figures <https://www.baltyk2.pl/fakty-i-dane-liczbowe/facts-and-figures/> (accessed 30 August 2022).

13 RWE Offshore Wind Poland Sp. z o.o., <https://pl.rwe.com/rwe-offshore-wind-poland-sp-zoo> (accessed 30 August 2022).

14 See Order of the Vice-President of the Court of Justice of the European Union of 21.05.2021 in Case C-121/21 R; Press Release of the Court of Justice of the European Union No. 89/21 of 21.05.2021.

15 Treaty on the Functioning of the European Union 2012/C 326/01, OJ EU 26.10.2012, C 326/49.

to immediately cease lignite mining at the Turów mine until a final judgment is issued.¹⁶

Poland has not complied with this CJEU ruling. An immediate halt to hard coal mining would have entailed an interruption of electricity production at the mine and the Turów power plant. It has been argued that lignite cannot be transported over long distances, as this is unprofitable for logistical reasons. Besides, a halt in mining would significantly undermine Poland's energy security, as the total capacity of the Turów power plant is about 2 GW, which translates into covering the electricity needs of about 7% of Poland's population. Furthermore, the cessation of operations could significantly disrupt the stable operation of the National Power System, resulting in the deprivation of electricity for approximately 3.2 million people.¹⁷

Consequently, due to Poland's omission of the interim measure imposed by the CJEU, the Czech Republic requested Poland to pay them a periodic penalty of EUR 5 million per day of mining. The CJEU also required Poland to pay a penalty of EUR 0.5 million per day to the European Commission.¹⁸

Despite the penalty imposed, due to the aforementioned need to ensure energy security for its citizens, Poland will not cease mining at the Turów mine. It also did not agree with the CJEU ruling and did not pay the imposed penalties. At the same time, however, talks were held to amicably resolve the dispute and reach an agreement between the Czech Republic and Poland. A consensus was finally reached at the beginning of February 2022. Both countries committed to a mutual exchange of hydrogeological information to assess the mine's impact on groundwater. In addition, Poland undertook to construct additional underground wells and integrate their system into a joint Czech–Polish monitoring network; build automatic air-monitoring stations; and construct an underground sealing barrier to prevent groundwater outflow from the Czech Republic.¹⁹

16 Above n. 15; see also, for example, B. Derski, R. Zasuń, Turów mine (and power plant) to stand immediately, <https://wysokienapiecie.pl/37808-kopalnia-elektrownia-turow-maja-natychmiast-stanac-postanowil-trybunal/> (accessed 30 August 2022).

17 7 per cent of domestic energy flows from Turow, <https://turow2044.pl/7-procent-krajowej-energii-plynie-z-turowa> (accessed 30 August 2022).

18 Order of the Vice-President of the Court of Justice of the European Union of 20.09.2021 in Case C-121/21 R.

19 There is a Polish–Czech agreement on the Turów Mine, <https://biznesalert.pl/jest-porozumienie-polsko-czeskie-ws-kopalni-turow/> (accessed 30 August 2022).

4. The problem of the utility of the British law for the Polish legal regulations concerning offshore wind farms

To what extent can conducting comparative research on the constitutional environmental safety aspects of OFWs in UK law be useful for the development of the Polish legal system?

In trying to answer this question, it may be noted that currently in Poland, both private entities (investors) and public entities (governmental and self-governmental units) have started to gather the necessary legal experience, which will certainly bear fruit in the development of subsequent projects. Many administrative and technical issues are new, especially for the Polish administrative bodies, which will proceed with the issuance of particular decisions or administrative and legal permits concerning the OWFs. Therefore, for the optimal development of the Polish law system, the relevant acquis drawn from foreign law will be useful.

In legal practice, a realistic estimate is that the increase in offshore capacity over the next five years will be close to 28 GW, and the country that will dominate the development of the offshore industry will be the UK, which may install some 10 GW. Moreover, by 2030, capacity is forecast to grow by some 70 GW in a realistic scenario, and up to 99 GW in a very optimistic scenario.²⁰ It should also be noted that the forecasts coincide with the data provided by the European Commission, which has estimated the Baltic Sea potential at 93 GW by 2050.²¹

An analysis of the aforementioned circumstances leads to the conclusion that it would be extremely useful to employ methods and solutions already developed in those legal systems where numerous offshore projects have been successfully implemented. The UK legal regime in particular could therefore be such a system. As mentioned previously, the UK currently has the largest amount of offshore wind capacity installed. Moreover, projects have been implemented around the British Isles for several decades, which translates into valuable experience regarding potential legal issues that may arise during the course of an investment, as well as possible ways of resolving them. Finally, as it is commonly known, the British law system (common law) has many original solutions in comparison to the Polish system (civil law); such solutions may enrich the domestic legal constructions and, as a result, create an optimal legal model for regulating an OWF investment.

20 Above n. 5; see also, for example, Polish Wind Energy Association, Polish Wind Energy 4.0, Report 2022, <http://psew.pl/wp-content/uploads/2022/06/skompresowany-raport-22Polska-energetyka-wlatrowa-4.022-2022-.pdf> (accessed 30 August 2022).

21 Supreme Chamber of Control, Information on the results of the control offshore wind energy development, lgd.430.001.2022, <https://www.nik.gov.pl/plik/id,26348,vp,29136.pdf> (accessed 30 August 2022).

5. Constitutional aspects of ecological safety in the Polish legal system

5.1 The Polish Constitution

The Polish renewable energy law on OWFs, as mentioned previously, is basically only just taking shape. The number of scientific studies concerning it is still relatively small and rather general in nature.²²

As far as constitutional and legal regulations are concerned, it should be pointed out that the Polish Constitution²³ does not contain any norms directly referring to offshore investments. There are, however, provisions referring to the issue of environmental safety in the scope of OWFs in an indirect way. First of all, it is worth noting Article 5, which introduces the principle of sustainable development, indicating at the same time that it should be ensured in the pursuit of the safety of citizens and environmental protection. The second of the key constitutional provisions in this regard is Article 74, which explicitly norms the principle of ensuring ecological safety. The development of this principle is, in particular, the right to information on the state and protection of the environment and support for citizen action to protect and improve the environment (Article 74(3) and (4) of the Constitution).²⁴

5.2 Respective statutory legislature regarding offshore ecological safety

In view of the general nature of the constitutional norms regarding OWF investments, a direct reference to ensuring environmental safety should be sought in the relevant laws containing the relevant specific norms. First and foremost, the

22 See, for example, T. Bojar-Fijałkowski, *Rozwój morskiej energetyki wiatrowej w Polsce – uwagi na tle gospodarczego prawa środowiska* [Development of Offshore Wind Energy in Poland – Remarks on the Background of Economic Environmental Law], *Gdańskie Studia Prawnicze* 2021, no. 3, pp. 63–73; M. Wroniak, M. Kowara, Poland, in: *Offshore Wind Worldwide. Regulatory Framework in Selected Countries*, ed. C. Knüte, Hamburg 2020, pp. 124–133.

23 *Konstytucja Rzeczypospolitej Polskiej z 2 kwietnia 1997 r.* [Constitution of the Republic of Poland of 2 April 1997] *Dz.U.* 1997 no. 78 item 483, as amended.

24 See, for example, J. Ciechanowicz-McLean, *Konstytucyjna zasada wolności gospodarczej a ochrona środowiska* [The constitutional principle of economic freedom and environmental protection], *Gdańskie Studia Prawnicze* 2014, no. 1, pp. 99–108; A. Krzywoń, *Konstytucja RP a środowisko* [The Constitution of the Republic of Poland and the environment], *Państwo i Prawo* 2012, vol. 8, pp. 3–16; B. Rakoczy, *Elastyczność zasady zrównoważonego rozwoju w kontekście adaptacji do zmian klimatu* [Flexibility of the Principle of Sustainable Development in the Context of Adaptation to Climate Change], *Gdańskie Studia Prawnicze* 2021, no. 3, pp. 21–33; M. Roliński, *Z problematyki zasad ochrony środowiska*, [From the issues of the principles of environmental protection], *Studia Iuridica Lublinensia* 2014, vol. 21, pp. 145–156.

Act of 17 December 2020 on the promotion of electricity generation in OWFs (hereinafter: UMFW) should be mentioned here,²⁵ which is the basic statutory Act concerning offshore investments. Among other things, the Act defines the principles and conditions for providing support for electricity generated in OWFs and defines phases concerning the preparation and implementation of investments in the construction of OWFs. In addition, the Act also regulates the principles of disposing of a set of power-generation facilities and an OFW, as well as regulating the requirements related to the construction, operation and decommissioning of an OFW.

An important normative Act in the field of OFW is also the Act of 21 March 1991 on maritime areas of the Republic of Poland and maritime administration (hereinafter: UOMRP).²⁶ The indicated legal Act specifies in particular the parameters related to the erection and use of artificial islands. It is also impossible not to mention the Act of 3 October 2008 on the provision of information on the environment and its protection, public participation in environmental protection and environmental impact assessments (hereinafter: UUIŚ).²⁷ This Act normalises the key issue, from the point of view of environmental safety, of the obligation to carry out an environmental impact assessment of a project.

To a much lesser extent, issues related to the development of the OFW have been defined in other legal Acts. In particular, such normative regulations include the Act of 7 July 1994 on the Construction Law,²⁸ the Act of 9 June 2011 on the Geological and Mining Law,²⁹ the Act of 20 July 2017 on the Water Law,³⁰ the Act of 10 April 1997 on the Energy Law,³¹ the Act of 18 August 2011 on the Maritime

25 Ustawa z dnia 17 grudnia 2020 r. o promowaniu wytwarzania energii elektrycznej w morskich farmach wiatrowych [Act of 17 December 2020 on promoting electricity generation in offshore wind farms] Dz.U. 2021 item 234 as amended.

26 Ustawa z 21 marca 1991 r. o obszarach morskich Rzeczypospolitej Polskiej i administracji morskiej [Act of 21 March 1991 on the maritime areas of the Republic of Poland and maritime administration] Dz.U. 1991 no. 32 item 131 as amended.

27 Ustawie z 3 października 2008 r. o udostępnianiu informacji o środowisku i jego ochronie, udziale społeczeństwa w ochronie środowiska oraz o ocenach oddziaływania na środowisko [Act of 3 October 2008 on the provision of information on the environment and its protection, public participation in environmental protection and on environmental impact assessments] Dz. U. 2008 no. 199 item 1227 as amended.

28 Ustawa z dnia 7 lipca 1994 r. prawo budowlane [The Act of 7 July 1994 on construction law] Dz. U. 1994 no. 89 item 414 as amended.

29 Ustawa z 9 czerwca 2011 r. prawo geologiczne i górnicze [The Act of 9 June 2011, Geological and Mining Law] Dz. U. 2011 no. 163 item 981 as amended.

30 Ustawa z dnia 20 lipca 2017 r. prawo wodne [Act of 20 July 2017, Water law] Dz. U. 2017 item 1566 as amended.

31 Ustawa z 10 kwietnia 1997 r. prawo energetyczne [The Energy Law of 10 April 1997] Dz. U. 1997 no. 54 item 348 as amended.

Safety³², the Act of 27 March 2003 on the Spatial Planning and Development³³ and the Act of 24 July 2015 on the preparation and implementation of strategic investments in transmission networks.³⁴

5.3 Protection instruments in the form of specific legal provisions (*lex specialis*)

The Polish legislator has not provided for a legal Act that is explicitly dedicated to the protection of environmental safety in the field of OWFs. Instead, the previously mentioned Acts of a general nature are applicable. However, a certain expression of the constitutional–legal environmental protection may be the requirement to obtain numerous administrative decisions from various authorities, which within the scope of their cognition verify the possible negative impacts of the OWFs. Detailed issues concerning the said decisions are included in the content of the UMFW provisions.

An example of an important administrative decision that must be obtained before the start of an OWF investment is the permit required for the erection of artificial islands. This permit is issued by the Minister in charge of maritime economy or the territorially competent Director of the Maritime Office, respectively. The decision allowing for the erection of artificial islands cannot be issued if the planned investment would pose a threat to the environment, marine or offshore resources. It should also be emphasised that the aforementioned administrative authorities supervise the execution of the erection and exploitation of artificial islands (Articles 22–27t of the UOMRP).

5.4 Protection instruments in the form of the obligation to conduct an environmental impact assessment

An important element protecting environmental safety is the obligation to prepare reports on the environmental impact of a project. In particular, this obligation requires the preparation of an environmental impact assessment, which is necessary for projects that may potentially or always significantly affect the environment (Article 59 of UUIŚ). Such projects, which are clearly indicated in the Decree of

32 Ustawa z 18 sierpnia 2011 r. o bezpieczeństwie morskim [Act of 18 August 2011 on maritime safety], Dz. U. 2011 no. 228 item 1368 as amended.

33 Ustawa z 27 marca 2003 r. o planowaniu i zagospodarowaniu przestrzennym [Act of 27 March 2003 on spatial planning and development] Dz.U. 2003 no. 80 item 717 as amended.

34 Ustawa z 24 lipca 2015 r. o przygotowaniu i realizacji strategicznych inwestycji w zakresie sieci przesyłowych [Act of 24 July 2015 on the preparation and implementation of strategic investments in the field of transmission networks] Dz. U. 2015 item 1265 as amended.

the Council of Ministers of 10 September 2019, include investments in wind power plants.³⁵

The report on the environmental impact of the project should contain, among other information, a description of the planned project; its characteristics, together with the conditions of the area at the stage of execution and exploitation or use; the main characteristics of the production processes; information on the generated emissions and their type, including waste, resulting from the stage of execution and exploitation or use of the planned project; data on biodiversity; and use of natural resources. In addition, the investor in such a report should also include data on electricity consumption and demand or assess the risk of failure (Art. 66 of UUIŚ).

When the environmental report is ready, the investor can begin the next stage, which is to start the process of obtaining an environmental decision. The essence of the environmental decision is to determine the environmental conditions for the implementation of the project (Art. 71 of UUIŚ). Together with the application for the environmental decision, the investor is obliged to attach a number of additional documents (Art. 74 of UUIŚ). The body competent to issue the environmental decision for the construction of OWFs is the Regional Director for Environmental Protection (Art. 75 of UUIŚ).

5.5 Protection instruments in the form of the decommissioning of offshore wind farm installations

The legal regulations concerning the decommissioning of OWFs are set out in Chapter 10 of the UMFW. It is worth mentioning that not only the wind turbines themselves, but also the remaining infrastructure, are subject to mandatory decommissioning (Art. 82 of the UMFW). The legislator has stipulated that an OWF must meet the criteria regarding construction safety, fire safety, operational safety, environmental protection and appropriate structural operating conditions (Art. 82(1) of the UMFW). The investor is obliged to submit to the relevant administrative authorities an expert's report of compliance – a document specifying that the OWF meets the safety and environmental protection criteria listed earlier (Art. 82(2) of the UMFW). In addition, the investor is obliged to submit additional assessments, analyses and reports, as required by the transmission system operator (Art. 82(5) and (6) of the UMFW).

It should be noted that the detailed requirements for the technical characteristics of OWF elements, the scope and minimum content of the aforementioned

35 Rozporządzenie Rady Ministrów z dnia 10 września 2019 r. w sprawie przedsięwzięć mogących znacząco oddziaływać na środowisko [Decree of the Council of Ministers of 10 September 2019 on projects that may significantly affect the environment] Dz. U. 2019 item 1839.

assessments, analyses and reports, as well as the principles of operation and review of OWFs are set out in a legal Act dedicated for this purpose in the form of the Decree of the Minister of Climate and Environment of 25 May 2022 on detailed requirements for elements of the set of equipment for power derivation and for elements of substations located at sea.³⁶

It should be mentioned that, unfortunately, the Polish legislator did not explicitly provide for the obligation to establish securities guaranteeing the removal of the OWF after the completion of the investment. The obligation to secure was only provided for in the scope of ensuring the generation of electricity (Art. 5 of the UMFW) or the connection to the power grid (Art. 52 of the UMFW). There are also no more detailed provisions that would standardise the obligation to remove the OWF.

5.6 Prospective draft legal regulations regarding the constitutional ecological safety towards offshore wind farms in the Republic of Poland

Further legislative work on the development of OFWs is currently not excluded. Poland's Supreme Chamber of Control is critical of some of the legal solutions currently adopted, particularly with regard to the excessive dispersion of the competences of administrative bodies.³⁷

6. Constitutional aspects of ecological safety in the British legal system

6.1 Specific legal character of the uncodified constitution in the United Kingdom

There is an extremely rich body of literature that analyses the legal nature of the Constitution of the United Kingdom of Great Britain and Northern Ireland (hereinafter: the UK). In simple terms, it should be assumed that the UK does have a constitution, even though there is no legal Act formally designated as a constitution. In fact, in UK law there are (extremely developed) regulations that normalise the

36 Rozporządzenia Ministra Klimatu i Środowiska z dnia 25 maja 2022 r. w sprawie szczegółowych wymagań dla elementów zespołu urządzeń służących do wyprowadzenia mocy oraz dla elementów stacji elektroenergetycznych zlokalizowanych na morzu [Decree of the Minister of Climate and Environment of 25 May 2022 on detailed requirements for elements of a set of devices used for power evacuation and for elements of power stations located at sea] Dz. U. 2022 item 1257.

37 Above n. 21.

state system and basic principles governing the functioning of the legal system. One can therefore speak of a substantive constitution (uncodified constitution).³⁸

As an aside, it should additionally be emphasised that the constitutional–legal system for ensuring environmental safety in the UK (as opposed to the Polish legal system) does not assume a uniform character. This is, of course, due to the various legal subsystems that make up UK law understood *in genere*. A distinction, therefore, would have to be made between English law, Scottish law, Welsh law and (to some extent) Northern Ireland law. This ambivalence is also discernible in regard to the legal norms concerning investments in OWFs (although not to a very significant extent). As an example, the legal regulations concerning investments in offshore economic zones can be pointed out: namely, The Marine and Coastal Access Act 2009³⁹ and The Marine (Scotland) Act 2010.⁴⁰ However, due to the limited volume framework of this study, the following analysis will mainly consider regulations relating to legal regulations common to the whole of UK law, with some exceptions. Hence, the term UK law will be used as simplification (*sensu largo*).

6.2 General legal regime of constitutional ecological safety in light of offshore wind farms

Elements of constitutional environmental protection and environmental safety can be seen in numerous normative acts. Mention should be made of The Wildlife and Countryside Act 1981,⁴¹ The Electricity Act 1989,⁴² The Energy Act 2004,⁴³ The Planning Act 2008,⁴⁴ The Marine and Coastal Access Act 2009,⁴⁵ The Marine (Scotland) Act 2010,⁴⁶ The Town and Country Planning (Environmental Impact Assessment) Regulations 2017,⁴⁷ as well as The Conservation of Offshore Marine Habitats and Species Regulations 2017.⁴⁸

38 See, for example, J. Alder, *Constitutional and administrative Law*, Palgrave Macmillan 1999, pp. 23–43; H. Barnett, *Constitutional and administrative Law*, Routledge 2020, pp. 3–29; A.W. Bradley, K.D. Ewing, C.J.S. Knight (eds.), *Constitutional and administrative law*, Pearson 2022, pp. 3–33; N. Howard, *Beginning constitutional law*, Routledge 2016, pp. 1–39.

39 UK Pub. Gen. Act 2009 c. 23 as amended.

40 Acts of the Scottish Parliament 2010 asp 5 as amended.

41 UK Pub. Gen. Act 1981 c. 69 as amended.

42 UK Pub. Gen. Act 1989 c. 29 as amended.

43 UK Pub. Gen. Act 2004 c. 20 as amended.

44 UK Pub. Gen. Act 2008 c. 29 as amended.

45 Above n. 38.

46 Above n. 39.

47 UK S.I. 2017 No. 1012 as amended.

48 UK S.I. 2017 No. 1013 as amended.

At this point, however, it is worth noting a rather important peculiarity of OWF investment legislation. Namely, the UK legislature has accepted that in addition to general legislation on offshore investment (falling under the category of primary legislation), there will also be individual legislation on specific, individually designated OWFs (falling under the category of secondary legislation). Therefore, in principle, each OWF project has its own dedicated legislation. Examples include the recently adopted The Norfolk Boreas Offshore Wind Farm Order 2021,⁴⁹ The Norfolk Vanguard Offshore Wind Farm Order 2022⁵⁰ and The East Anglia TWO Offshore Wind Farm Order 2022.⁵¹

These specific regulations in the form of Orders contain numerous legal norms that introduce appropriate facilitations for the realisation of investments in a specific OWF. Taking The Norfolk Vanguard Offshore Wind Farm Order 2022 (hereinafter: NV Order) as an example, one may point to provisions containing the following, in particular: facilitation of obtaining certain administrative and legal consents and permissions (Article 3 of the NV Order); rights to assign certain subjective rights by the investor in favour of third parties (Article 6 of the NV Order); or limitations concerning admissibility of complaints about immissions caused by wind turbines (Article 8 of the NV Order). In addition, it is possible to point to regulations that also concern specific stages of the investment implementation, such as a broadening of the rights to use public roads (Article 9 of the NV Order); facilitation of the use of water-drainage infrastructure and watercourses (Article 15 of the NV Order); the right to obtain the possibility to use the real property on which the offshore investment will be implemented (Article 18 of the NV Order); and simplification of the procedure for obtaining a general permit to use an OFW (Article 31 of the NV Order).

It is worth noting, however, that despite the introduction of numerous detailed solutions, the said Orders do not violate the essence and basic principles of the regulation of conducting investments in OFWs. By way of exemplification, despite significant facilitations and simplifications of the administrative procedure, it is still obligatory to obtain relevant permits of a basic nature (Art. 3.2 and Art. 31.2 of the NV Order).

Legal issues relating to OFW investments have been studied fairly extensively in the academic literature on UK law. Hence, in view of the volume framework of this study, it seems reasonable to refer to the relevant publications⁵² and to focus only

49 UK S.I. 2021 No. 1414.

50 UK S.I. 2022 No. 138.

51 UK S.I. 2022 No. 433.

52 For more on the legal framework for offshore wind farm investment in the UK see, for example, I. Arrambide, I. Zubia, A. Madariaga, Critical review of offshore wind turbine energy production and site potential assessment, *Electric Power Systems Research* 2019, vol. 167, pp. 39–47; F. Kern, A.

on the most relevant jurisprudential issues. Thus, it seems that when discussing the issue of constitutional environmental protection in the field of offshore investments in the UK, particular jurisprudential significance should be attributed to three fundamental legal constructions. In fact, these constructions contain normative solutions that significantly stand out from the general legal principles concerning other than offshore investments. These are as follows: firstly, the introduction of specific provisions dedicated to OWFs (*lex specialis*); secondly, the obligation to conduct an environmental impact assessment; and thirdly, legal security of the obligation to remove OWFs after the completion of the investment. The indicated legal instruments will be discussed in turn.

6.3 Protection instruments in the form of specific legal provisions (*lex specialis*)

An extremely important instrument of constitutional–legal protection of ecology in regard to investments in OWFs is also the relevant legal norms, which ensure the protection of the environment against the possible negative impact of such an investment. It should be noted that an important place in this context is occupied by The Conservation of Offshore Marine Habitats and Species Regulations 2017 (hereinafter: COMHSR), which applies to so-called European marine sites.⁵³

This legislation contains a large number of provisions for protecting the environment, particularly in the areas most affected by OWFs. This includes the protection of selected animal species (protection of species) and the protection of their habitats (protection of habitat). In regard to the protection of species, British law provides for the protection of wild bird species (as well as their eggs and nests – Articles 40–44 of the COMHSR); the protection of other animals that are listed in specific legislation (Articles 45–48 of the COMHSR); and the protection of natural vegetation (Art. 49). Furthermore, in terms of ensuring the security of habitats, the legal Act analysed provides not only for obligations to ensure adequate surveillance and

Smith, C. Shaw, R. Raven, B. Verhees, From laggard to leader: explaining offshore wind developments in the UK, *Energy Policy* 2014, vol. 69, pp. 635–646; S. Kota, S.B. Bayne, S. Nimmagadda, Offshore wind energy: a comparative analysis of UK, USA and India, *Renewable and Sustainable Energy Reviews* 2015, vol. 41, pp. 685–694; V. Mytilinou, A.J. Kolios, Techno-economic optimisation of offshore wind farms based on life cycle cost analysis on the UK, *Renewable Energy* 2019, vol. 132, pp. 439–440.

53 For a more extensive discussion of this legislation see, for example, V. Ramos, G. Giannini, T. Calheiros-Cabral, P. Rosa-Santos, F. Taveira-Pinto, Legal framework of marine renewable energy: A review for the Atlantic region of Europe, *Renewable and Sustainable Energy Reviews* 2021, vol. 137, article 110608, pp. 1–16; C. Shannon, C.H. Quinn, A.M. Dunn, P.D. Stebbing, Coherence of marine alien species biosecurity legislation: a study of England and Wales, *Marine Pollution Bulletin* 2020, vol. 161, part B, article 111796, pp. 1–8.

monitoring of habitats (Articles 50–53 of the COMHSR) but also for the prohibition of the introduction of animal or plant species other than native species (originally found in the area – Article 54 of the COMHSR).

Interestingly, the wording of the aforementioned Act also provides for various types of criminal sanctions, which are aimed at ensuring environmental safety by preventing negative impacts on the environment. One should note here, for example, the offences of providing untrue information or documents in order to obtain an administrative decision allowing for the realisation of investments in offshore wind power plants (Article 57 of the COMHSR). Furthermore, and equally interestingly, the legislation provides for the possibility of establishing an additional administrative body in the form of a Wildlife Officer (Article 58 of the COMHSR). The officer's task is to check and determine whether environmental offences have been committed in connection with OWF investments (Article 59 of the COMHSR). For this purpose, the legislator has equipped the officer with numerous powers concerning, in particular, inspections and hearings (Articles 60–73 of the COMHSR).

6.4 Protection instruments in the form of the obligation to conduct an environmental impact assessment

The constitutional protection of the environment against the negative impact of offshore investments is also expressed in the investor's obligation to carry out appropriate environmental impact assessments of its planned OWF investments.⁵⁴ Among the numerous documents related to the conduct of appropriate impact assessments, two in particular are worth noting: namely, the Environmental Impact Assessment and the Habitat Regulation Assessments.

In regard to the Environmental Impact Assessment, it should be noted that the obligation to submit it is provided for in the wording of The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (hereinafter: CPR). An impact assessment is already required at the stage of obtaining planning permission (Article 3 of the CPR). The British legislature has provided for a number

54 For more on the regulation of environmental impact assessment for offshore wind farms, see, for example, H. Bailey, K.L. Brookes, P.M. Thompson, Assessing environmental impacts of offshore wind farms: lessons learned and recommendations for the future, *Aquatic Biosystems* 2014, vol. 10, article 8, pp. 1–11; E. A. Masden, A. McCluskie, E. Owen, R.H.W. Langston, Renewable energy developments in an uncertain world: the case of offshore wind and birds in the UK, *Marine Policy* 2015, vol. 51, pp. 169–171; R.K.A. Morris, The application of the Habitats Directive in the UK: compliance or gold plating?, *Land Use Policy* 2011, vol. 28, iss. 1, pp. 361–369; D. Toke, The UK offshore wind power programme: a sea-change in UK energy policy?, *Energy Policy* 2011, vol. 39, iss. 2, pp. 526–534.

of detailed regulations that specify the requirements for the various stages of the Environmental Impact Assessment. In particular, there are provisions relating to the supervision of the administrative authorities in the course of the assessment (Articles 5–7 of the CPR); the procedure for submitting the assessment to the authorities (Articles 8–14 of the CPR); the necessary elements and annexes that the assessment must contain (Articles 15–27 of the CPR); and certain information obligations (Articles 28–30 of the CPR).

At the same time, it is worth noting that the legal regulations clearly indicate that in terms of content, the Environmental Impact Assessment should contain a comprehensive and reliable analysis of the environmental impact of the investment. The assessment should take into account both direct and indirect impacts on such elements of the environment as (in particular) human population and health, biodiversity (with particular emphasis on protected species and habitats), soil, water, air and climate, as well as material assets, cultural heritage and landscape (Article 4(2)(a-e) of the CPR).

Interestingly, among the legal regulations concerning environmental impact assessment, the British legal system explicitly includes wind power plants as a type of investment that in principle requires the preparation of an Environmental Impact Assessment (annex to the CPR – SCHEDULE 2). It should be emphasised that such a solution makes the whole legal framework more adapted to the specific requirements of an offshore investment.

Turning to the analysis of the legal issues related to the second of the mentioned environmental assessment documents (i. e., the Habitat Regulation Assessments), it should be pointed out that the legal basis providing for the obligation to develop such assessment documents is The Conservation of Habitats and Species Regulations 2017 (hereinafter: CHS). It should be noted, however, that the indicated legal regulation was adopted with reference to the provisions of the European Communities Act 1972,⁵⁵ and it therefore essentially concerns areas of so-called European marine sites (Articles 8 and 12–19 of the CHS).

The primary aim of the regulations for the preparation of Habitat Regulation Assessments is to ensure that nature is fully protected and that adverse environmental impacts are reduced. The legal provisions governing Habitat Regulation Assessments, therefore, specifically address elements such as interacting with the authorities; making a thorough analysis of the environmental impact; and indicating possible measures that can be taken to reduce or offset the negative environmental impact (Articles 61–113 of the CHS). Quite importantly, the content of the legal regulation under consideration also distinguishes areas under special environmental protection (special protection areas). Accordingly, investments in such areas

55 UK Pub. Gen. Act 1972 c. 68.

must be preceded by the preparation of Habitat Regulation Assessments (Articles 15–16 of the CHS).

One cannot fail to mention that the mere introduction of appropriate legal regulations is obviously not sufficient to ensure comprehensive environmental protection regarding OWF investments. The second key element is to ensure adequate compliance with the indicated regulations. Also in this context, the British legislator has provided for appropriate legal provisions. In particular, it is worth noting the supervision and control tools that have been provided for the conduct of the environmental impact assessment. Thus, these will be, for example, the norms ordering the relevant administrative bodies to take measures that allow for a reliable and effective verification of the information provided in environmental impact assessments (Articles 4(5) and 5–7 of The Town and Country Planning (Environmental Impact Assessment) Regulations 2017).

6.5 Protection instruments in the form of the decommissioning of offshore wind farm installations

The British legislator decided to comprehensively regulate the issue of dormancy of OWFs in the Energy Act 2004 (hereinafter: EA) – specifically, in Chapter 3: Decommissioning of offshore installations. The content of the indicated legal regulation explicitly provides for the obligation to remove not only the wind turbines themselves but also the associated infrastructure; thus, the entire OWF is at stake.⁵⁶ Obviously, the obligation of removal applies only to investments established for a specified period of time, which will not be continued (Articles 105 and 109 of the EA).⁵⁷

The obligation to remove an OWF is subject to specific oversight by the relevant administrative authorities, which are either the Scottish Ministers – in the case of Scotland – or the Secretary of State, as appropriate (Article 105 sec. 1A of the EA). In particular, the designated authority may require the preparation and submission of an appropriate programme for the removal of the OWF (decommissioning programme – Article 105 sec. 2 of the EA). This programme should, in particular,

56 For more on the removal of offshore wind farms see, for example, R.J. Heffron, Energy law for decommissioning in the energy sector in the 21st century, *The Journal of World Energy Law & Business* 2018, vol. 11, iss. 3, pp. 189–195; C. Mackie, A.P.M. Valenturf, Trouble on the horizon: securing the decommissioning of offshore renewable energy installations in UK waters, *Energy Policy* 2021, vol. 157, article 112479, pp. 1–11; K. Smyth, N. Christie, D. Burdon, J.P. Atkins, R. Barnes, M. Elliott, Renewables-to-reefs? – Decommissioning options for the offshore wind power industry, *Marine Pollution Bulletin* 2015, vol. 90, iss. 1–2, pp. 247–257.

57 It is worth recalling at this point that the obligation to remove wind turbines from areas of maritime economic zones in international law derives from the wording of Articles 60 and 147 of The United Nations Convention on the Law of the Sea 1982?

specify the measures necessary for the removal of the power plant; the estimated costs and expenses of the removal; the time limits for the removal; and the obligation to restore the project site to its previous state or the obligation to monitor the site and to carry out appropriate maintenance if part of the installation is left (Article 105 sec. 8 of the EA). The programme is then subject to approval by the said administrative authority, which may order appropriate changes or impose additional conditions and requirements (Articles 106–108 of the EA).

It is clear that in order to ensure environmental safety in regard to the removal of OWFs (due to the very high costs involved), it is necessary, in addition to the obligation of the developer itself, to provide adequate security for the fulfilment of the indicated removal obligation. Accordingly, the British legislator has provided for appropriate legal norms in this regard. First of all, one may note the general provisions concerning the obligation to provide adequate security for the removal of OWFs, while considerable leeway is left as to the determination of the specific legal instruments for the security (Articles 110A–110B of the EA). Importantly, in order to ensure the effectiveness of the enforcement of the security, the rights (including claims) serving as security have been exempted from enforcement in the event of insolvency (Article 110A sec. 4 of the EA). In addition, the removal supervisor has the power to require the submission of details about the security in order to determine whether the security will be sufficient for the investor to perform its obligations (Article 110B EA).

In addition, public law sanctions (both administrative and criminal) are provided for the obligation to remove OWFs. Any removal of wind farms by the investor contrary to the approved decommissioning programme or carried out without the consent of the relevant administrative authority is treated as a criminal offence (Articles 109 and 113 of the EA). In addition, supervisory powers are provided for the authority to verify the regularity of the wind farm removal process (Articles 110 and 113 of the EA). In particular, the relevant supervisory authority may request information and the translation of documents that are necessary for the purpose of assessing the regularity of the offshore disposal process (Articles 110–112A of the EA). Failure to comply with the supervisory authority's recommendations to carry out the offshore removal process is punishable by criminal sanctions (Articles 110 and 113 of the EA).

6.6 Prospective draft legal regulations regarding the constitutional ecological safety towards offshore wind farms in the United Kingdom

In this context, soft law Acts also play a momentous role in terms of constitutional environmental protection for OWF development in the UK by providing directions for future normative regulation. In particular, it is worth noting the most recent package of government proposals for legislative change, which was announced on

7 April 2022: namely, the British Energy Security Strategy. This is a government document setting out the UK's offshore energy policy. In addition, part of the indicated package is the Offshore Wind Environmental Improvement Package. This contains important legal standards, setting out the principles of climate and environmental protection.⁵⁸

Amongst the numerous legal changes which, as part of the Offshore Wind Environmental Improvement Package, are intended to increase constitutional environmental safety standards within the scope of the UK legal order, three key elements in particular should be mentioned. Firstly, these are the changes to the aforementioned Habitats Regulations Assessments, which involve speeding up the environmental assessment process while also increasing environmental protection. Secondly, the package aims to introduce new legal instruments to compensate for and offset the environmental damage that will result from the construction of an OFW. And thirdly, from 2023, it is planned to create a special state fund (Marine Recovery Fund), the primary purpose of which will be to provide financial support to individual projects for the aforementioned compensation of losses to the marine environment.⁵⁹

7. Conclusion

The analysis conducted allows the conclusion that the basic direction of the legislative development of Polish constitutional regulations concerning environmental safety in the scope of the OFW has been chosen correctly. At the same time, however, when preparing future drafts of statutory changes, it is worth drawing on the rich heritage of the British legal system, which is much more detailed and optimised than the Polish regulations in their present form. Therefore, it is to be hoped that appropriate inspiration from the British regulations will allow the most accurate legal model of OFW development to be worked out in relation to the constitutional principle of ensuring environmental safety.

58 UK Government, Guidance Energy Security Bill factsheet: Offshore wind environmental improvement package, <https://www.gov.uk/government/publications/energy-security-bill-factsheets/energy-security-bill-factsheet-offshore-wind-environmental-improvement-package> (accessed 30 August 2022).

59 Above n. 57.

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