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THE EU TAXONOMY AS A BUSINESS ASSESSMENT TOOL: OPPORTUNITIES AND THREATS, CHANCES TO USE NEW TECHNOLOGIES

Abstract: The text presents EU taxonomy, part of European Green Deal, as a tool for environmental verification of businesses. It explains and describes the concept and relationship between EGD, CSRD, ESG and taxonomy. The text also attempts to identify the opportunities and risks for entrepreneurs associated with these new regulations. Understanding and exploiting them can support growth in the market. The first part of text focuses on the characterisation of the EGD policy and, within this, non-financial ESG reporting as CSRD obligation. Part two focuses on what the taxonomy is and what it serves. The third and final part deals with the new standards for categorising business activities as environmentally sustainable and the criteria for such recognition. In this part, an attempt is also made to indicate the possibilities of using new technologies like GIS and AI in taxonomy. Paper ends with conclusions and de lege ferenda recommendations. The whole is finished with list of resources valid on 15.05.2024.

Keywords: European Green Deal, CSRD, ESG, taxonomy, GIS and AI technology

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Introduction

This text deals with an extremely recent issue on the borderline between environmental law and business law. This area, which is extremely dynamic among European Union regulations, can be called ' business environmental law'. The author's intention, in addition to introducing the still rather mysterious and confused acronyms and systems of EDG, CSRD, ESG and taxonomy, is to point out the risks and opportunities that these regulations entail. Moreover, the author sees them as an opportunity to use GIS and AI instruments as well, but in order to design this effectively and wisely one must first know the basic challenges and the current state of regulation.

State of a problem

The European Union has set itself ambitious environmental goals for climate protection by becoming a global leader in such actions. Their implementation requires significant changes in the EU economy. At the same time, businesses and individuals have experienced unprecedented difficulties in recent years as a result of pandemics, war and the energy crisis. The implementation, recently criticised for example by farmers, of the doctrine of the "European Green Deal" (EGD) with each piece of legislation presents new directions, but also conditions and constraints for economic activity in the common market. Preliminary estimates indicate that more than 3,000 entrepreneurs will be covered by taxonomy as EGD legislation in Poland alone, the main ones being large and listed on the stock exchange, i.e. important for and trend-setters in the market.

It is therefore worth considering how environmental and climate legislation affects public economic law in the area of freedom of establishment? What are the new non-financial reporting obligations and criteria for declaring a business to be environmentally sustainable and are they a sine qua non conditions for doing business in the European Union at all? Does this law bring only concerns and risks, as some judge the EGD to be, or does it bring some opportunities and possibilities? Can AI and GIS technological instruments be used in taxonomy procedures and how?

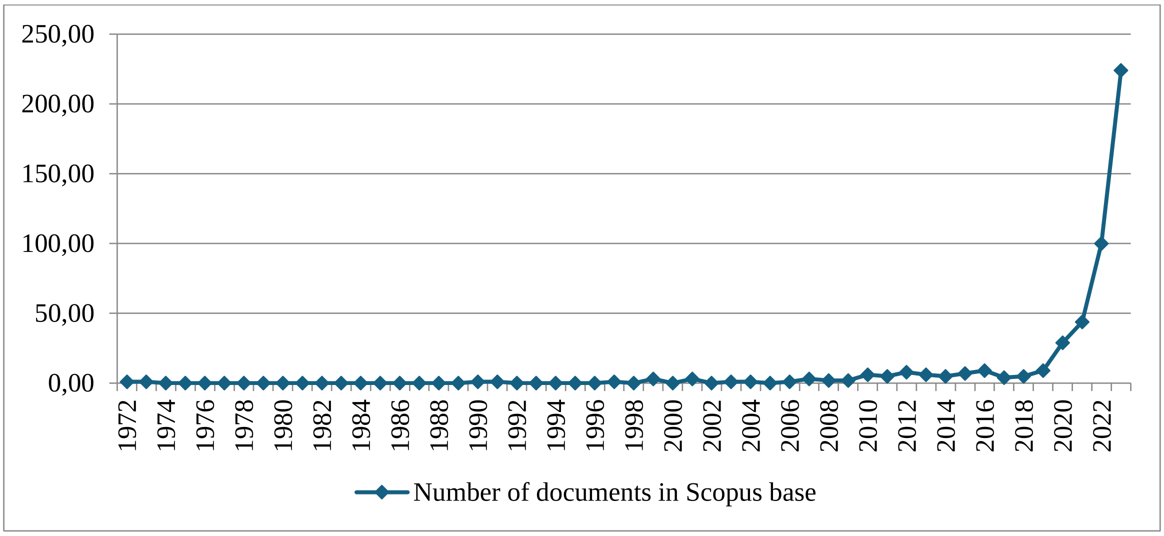
Materials and methods

An attempt to answer these questions requires the application of a dogmatic-legal analysis to the regulations currently in force and, in order to understand them more fully, the use of a historical-legal method to earlier regulations. The research problems outlined in this way determine the layout of the work. The first part focuses on the characterisation of the EGD policy and, within this, non-financial ESG reporting as CSRD obligation. Part two focuses on what the taxonomy is and what it serves. The third and final part deals with the new standards for categorising business activities as environmentally sustainable and the criteria for such recognition. In this part, an attempt is also made to indicate the possibilities of using new technologies in the study of taxonomy. Paper ends with conclusions and de lege ferenda recommendations.

The issue raised in this text is still fairly new in the business law system. The available literature is more in the nature of tutorials than academic papers and deals with non-financial reporting of ESG data, which is only the basis for a taxonomy. In this respect, reference can be made to works, but not legal papers (Baumüller & Grbenic, 2021; Frecautan & Nita, 2022; He et al., 2022; Tsang et al., 2023). It is definitely less so on Polish legal grounds (Bojar-Fijałkowski, 2024).

Moreover, the EU regulations on ESG reporting do not even yet have Polish implementing provisions in the form of laws. The Minister of Funds and Development is currently consulting the public on a draft of such a law. Hence, we can expect greater doctrinal interest in this issue after the adoption of national regulations and after the first implementation of ESG and taxonomy regulations in 2025. As for the taxonomy itself, the process of implementation into national law is still less advanced, hence the lack of literature.

Globally, the topic about ESG implementation is very narrowly represented, but in fact it is an extremely important practical aspect. Scientifically, the topic exist from 2020 when 29 scientific documents in Scopus base appeared. Then, the interest start to increase significantly, what is documented by the Graph 1.



Graph 1. Number of scientific documents in Scopus base for filter: TITLE-ABS-KEY (esg AND implementations)
Source: own study based on Scopus

Those selected documents comes from countries: Russian Federation (110), China (52), United States (41), United Kingdom (27), Italy (24), Germany (22), India (21), South Korea (18), Poland 14) and Portugal (13) and others. Mainly these are articles (55,8%), Conference Papers (23,7%), Book chapters (13,7%), Reviews (4,4%), Conference Reviews (1,9%) and books (0,6%).

The study is based on sources available and valid on 15.05.2024.

Results and discussions: EGD and CSRD

EGD is the name of a broad development strategy to bring about an environmentally friendly transformation of the European Union's economy. Through it, the community is to achieve ambitious goals relating to emission reduction, the development of innovative technologies and innovations, and environmental protection. The target is for the European Union to become a climate-neutral area by 2050. Achieving the goals set out in the EGD will require regulatory intervention in at least several sectors of the economy, through:

- investment in environmentally friendly technologies;
- promoting eco-innovation in industry;
- introducing cleaner, cheaper and healthier methods of transport;
- decarbonising the energy sector;
- making buildings more energy efficient;
- working with international partners to improve global environmental standards.

The new regulations are expected to include the development of alternative and green energy sources, but also changing the production cycles of a wide range of products to be more sustainable and environmentally friendly and greening the construction sector. Some of the above policy declarations have already been translated into legislative proposals and are currently under way. The European Commission is dedicating the Fair Transition Mechanism, under which regions are to receive €100 billion from the 2021–2027 budget, to this goal. In addition to economic instruments, the above goals are to be achieved through a more efficient use of natural resources.

The EGD is currently becoming the doctrine that sets the community's goals for the coming decades, both in terms of economic and social development. Like any political doctrine, it needs to be encapsulated in legal instruments, firstly material norms and secondly implementation procedures [Bojar-Fijałkowski 2021]. Instruments for the embodiment of the EGD include the circular economy and the CSRD, and on its basis the taxonomy.

The reporting of non-financial information is addressed in Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting (hereinafter "CSRD"). The CSRD establishes an obligation to publish information in the areas of environmental, social and governance (ESG). The environmental are to cover standardised topics: climate change, pollution, water and marine resources, biodiversity and ecosystems, consumed resources and the circular economy. Social topics are: employment, workers in the value chain, social environment, consumers and end users. The final area covers the topics of business practices and corporate governance.

From 1 January 2024, this obligation will extend to large public-interest entities, i.e. listed entities whose shares are publicly traded and owned by the state. Large entities are those that, as at the balance sheet date, exceed at least two of the following three criteria:

- balance sheet total is 20 million euro;
- net sales revenue is €40 million;
- the average number of employees during the financial year is 250.

From 1 January 2025, this obligation will extend to all entities meeting the above criteria in large, including those that are not public interest entities. From 1 January 2026, the obligation will cover small and medium-sized public interest entities and other listed businesses. Small entities are those which, as at the balance sheet date, do not exceed the limits for at least two of the following three criteria:

- balance sheet total is EUR 4 million;
- net sales revenue is EUR 8 million;
- the average number of employees during the financial year is 50.

Medium-sized entities, on the other hand, are those which are neither micro nor small entities and which, at the balance sheet date, do not exceed the limits for at least two of the following three criteria:

- balance sheet total is EUR 20 million;
- net sales revenue is EUR 40 million;
- the average number of employees during the financial year is 250.

From 2027, the obligation of non-financial reporting, will also extend to selected non-EU based companies with a subsidiary or branch in an EU member state, which have annual revenues of more than EUR 150 million within the EU. These entities must include in a separate section of the management report the information necessary to understand the entity's impact on sustainability issues and the information necessary to understand how sustainability issues affect the entity's development, performance and position.
These rules also include, as of 1 January 2024, entities subject to the obligation to publish a consolidated statement on non-financial information. These are the leading entities of a large group comprising parent companies and subsidiaries that, in aggregate at the parent company's balance sheet date, exceed the limits for at least two of the following three criteria:

- balance sheet total is 20 million euro;
- net sales revenue is EUR 40 million;
- the average number of employees during the financial year is 250.

They will include in a separate section of the consolidated management report the information necessary to understand the group's impact on sustainability issues and the information necessary to understand the impact of sustainability issues on the group's development, performance and position.

The above criteria of the CSRD applies to approximately 50,000 companies worldwide, including some 3,500 Polish companies. While reporting information in area G, i.e. concerning their corporate governance and business relations, will not be difficult, areas E and S may be more demanding. The society area partly covers corporate social responsibility activities, which are already implemented in most large organisations. In contrast, the environmental activities are still new for most organisations. It can be expected that most of the information obligation can be fulfilled by stating that they have not undertaken such activities. The CSRD obligation is about reporting on actions taken, not about taking action, at least for now.

The designated authorities in each country, presumably the financial markets authorities, will monitor and hold organisations to account for whether they have complied with their reporting obligations. There are no national regulations yet, at least in Poland, as to what the penalties will be for failure to comply with this obligation. An interesting aspect, which is not legal but economic research, will be the analysis of whether and how the quality of reported ESG data will influence consumer decisions. It can be hypothesised that possible market consequences will be more motivating for businesses than penalties imposed by public administration.

Results and discussions: EU taxonomy

Taxonomy is the buzzword under which Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 has entered into general circulation. With this regulation, the EU legislator aims to harmonise the criteria for determining whether an economic activity qualifies as environmentally and climate sustainable.

The subjective scope of the regulation covers two groups of actors. The first are financial market participants or issuers in relation to financial products and corporate bonds that are made available as environmentally sustainable, and those who make these products available, i.e. intermediaries. Their obligations relate in particular to information about the services offered and their environmental impact. The entity catalogue of the taxonomy is completed by entrepreneurs of all industries to which the CSRD applies. They are obliged, among other things, to disclose what percentage of their capital expenditures and operating expenditures correspond to assets or processes related to business activities that qualify as environmentally sustainable within the meaning of the taxonomy. The deadlines for the taxonomy are those for CSRD reporting, i.e. in practice from 2025 for 2024.

According to taxonomy, an economic activity qualifies as environmentally sustainable if it meets four criteria together. Firstly, it makes a significant contribution to one or more of the six environmental objectives of climate change mitigation; climate change adaptation; sustainable use and conservation of water and marine resources; transition to a circular economy; pollution prevention and control; and protection and restoration of biodiversity and ecosystems. Secondly, it does not cause serious harm to any of these environmental objectives. Thirdly, it is carried out in accordance with minimum guarantees. The minimum guarantees are procedures to ensure that the standard of responsible business conduct is met, for example the OECD Guidelines for Multinational Enterprises and the UN and its specialised agencies on business and human rights, including in the area of workers' rights, environmental protection or anti-corruption. Fourthly, it meets the technical eligibility criteria established by separate regulations. At the same time, an activity qualifies as making a significant contribution to one or more environmental objectives if it directly assists other activities in making a significant contribution, provided that this does not lead to a dependence on assets that undermine long-term environmental objectives, with significant positive environmental effects.

Annex I of the regulation contains a description of activities corresponding to the NACE codes of the European statistical classification of economic activities. NACE groups organisations according to their activities. It further ranks the criteria in the area of climate change adaptation by indicating: physical and non-physical solutions that mitigate the most important physical climate-related risks identified; the physical climate-related risks that are key to the activity are identified from those listed in Appendix A of this Annex as a result of a detailed assessment of the climate-related risks and exposure to these risks at the stage of controlling the activity and controlling the solutions adopted; timescales for assessing the risks; sets of best available practices and knowledge sources; characteristics of the solutions implemented. The table in Appendix A of Annex I provides a classification of climate-related hazards and divides them into permanent and acute hazards and those related to:

- Temperature. Permanent are: air and water temperature change; heat stress; temperature variability; melting permafrost. Acute are: heat wave; cold and frost wave; spontaneous fire.
- Wind. Permanent are: changes in wind circulation. Acute are: cyclones, hurricanes, typhoons; snow, dust and sandstorms; tornadoes.
- Water. Permanent are: changes in precipitation patterns and types, i.e. rain, hail, snow, ice; precipitation variability or hydrological variability; ocean acidification; seawater intrusion; sea level rise; water scarcity. Acute are: drought; heavy rainfall, hail and snow; floods; glacial lake upwelling.
- Land. Permanent are: erosion of coastal areas; soil degradation; soil erosion; solifluction. Acute are: avalanche; landslide; landslide.

Table A in Appendix II indicates exactly the same risks in the areas of temperature, wind, water and land as Table A in Appendix I, which dealt with climate change mitigation.

Results and discussions: opportunities and threats

Quality has become a standard, at least on European markets and in the markets of developed, i.e. economically attractive, countries. Consumers today expect something more, and that something is environmental and climate care. Taxonomy standards will make it possible to compare businesses across the European Union and to award those that meet the criteria the title of environmentally sustainable. It is very likely that, based on the taxonomy, the labelling of goods and services from environmentally sustainable businesses will be clearly visible and noticeable.

Entrepreneurs who demonstrate that their business meets the taxonomy will have greater opportunities for growth, access to finance and markets. The European Union allocates considerable sums to research and development, including for entrepreneurs. There will probably be separate, more favourable pathways for those meeting the taxonomy criteria. Meeting the conditions of the taxonomy is an opportunity today and will soon be a condition for market participation. Today, it will make it possible to stand out from the competition; in a few years, it will make it possible to have an offer at all. Prompt recognition of these rules will enable entrepreneurs to gain and in future maintain a competitive edge.

On the other hand, ignorance of the taxonomy may expose the trader to legal consequences and sanctions, most likely financial. In addition, businesses failing to comply with the new obligations face serious image consequences. Consumers are increasingly aware and sensitive to environmental and climate issues. The richer the market, the more importance is attached to an ecological approach. For an entrepreneur, failing to achieve the status of an "environmentally sustainable business" may be tantamount to being excluded from the market by the customers themselves. It is likely that soon entrepreneurs who do not meet the conditions for environmental sustainability will also be formally excluded from public support and access to EU funds, including those for investment, development and research. Already today, failure to meet the conditions of the taxonomy shall, if national law was established, eliminate from the group of beneficiaries of the Fair Transformation Fund intended for green investments. It should also be expected that an entrepreneur who does not meet the conditions of the taxonomy will be excluded from the group of potential contractors of services or suppliers of goods purchased with funds from the European Union by an entity which received such support, e.g. within the framework of the National Reconstruction Plan or structural funds.

The reluctance to finance activities harmful to the environment is evident even among private international financial institutions. Soon, without confirmation that a business or investment is sustainable, it will either not be possible to obtain credit, or it will be much more expensive. This means that, within a few years, entrepreneurs carrying out activities that fall under the taxonomy but do not meet its criteria will be formally excluded from access to the part of the market that benefits from EU funds. The same will happen in markets regulated by the standard law of supply and demand, as consumers increasingly factor environmental criteria into their purchasing decisions.

Reporting environmental data will be most difficult for CSRD businesses. Social issues had already been included by them for some time, for example in their CSR policy descriptions. G corporate governance data were mandatory in financial reports, visible in registers, including those of stock exchanges. At the moment, there are no legally established or practically developed methods for reporting or verifying environmental S data, which will be used both in the CSRD and in future verification for taxonomy purposes.

The draft Polish law assumes that data will be verified by the accounting auditor during the audit of the report and balance sheet after the closed accounting year. The first time will be happen in spring 2025. Auditing accountants do not have adequate knowledge of environmental protection, environmental management, climate change adaptation. It is already apparent that they will require the support of experts from other disciplines in this area. It can and should also be considered to what extent GIS data can be used in verifying taxonomy fulfilment and to what extent AI can be used in these processes. Certainly AI can support the process of preparing reports and documents, but is this beneficial? Perhaps patterns and algorithms can be developed to aid reporting so that it does not end up creating large word studies with little content, or greenwashing activities.

Conclusions

The above study allows to the following conclusions and "de lege ferenda" postulates:

1. Environmental issues affect us all. In practical terms, climate change or the loss of biodiversity, for example, affect the lives of individuals and whole sectors of the economy. In the European Union, which is at the forefront of good environmental change, there is no more important topic or area today that affects all aspects of the common market. The European Green Deal is remodelling the economy with, among other things, a new taxonomy of economic activities. Hence, knowing these challenges, understanding them and learning their rules is so important for our continued successful existence, especially economically, in the European Union.
2. This area is often misunderstood, as evidenced by the farmers' protests. Things are not made any easier by the large number of acronyms and new terminology. Interest in the EGD, ESG, CSRD and taxonomy regulations is very much on the rise, as the statistics prove. These are new responsibilities, sometimes not yet equipped with process standards and not yet delegated from enforcement to designated public administrations. There is also little literature, especially legal one, as there is a little more economic and management publications. There are also no national studies, mainly European, which deal with general assumptions rather than local methods and procedures.
3. The EGD is a policy aiming for climate neutrality of the European Union in 2050. Such an ambitious goal requires extensive measures and many instruments. One of these is the extension of financial reporting obligations for companies to non-financial data reporting in the environmental, social and governance areas. Firstly, in 2025, the largest listed companies will present data for 2024, and then this group will expand every year. This obligation will affect more than 50,000 companies worldwide, including 3,500 in Poland. The catalogue of these entities is important, as they too will be subject to the rules of the taxonomy.
4. The taxonomy aims to harmonise criteria for determining whether an economic activity qualifies as environmentally and climate sustainable. Separate regulatory pathways apply to CSRD and financial services entities. The first ones are obliged to disclose what percentage of their capital expenditures and operating expenditures correspond to assets or processes related to business activities that qualify as environmentally sustainable. The regulation and its annexes will introduce activity codes and assessment criteria by which the entrepreneur can check for himself whether he meets them. For the moment, it has not yet been established who from the public administration will check it and penalise it for possible irregularities, at least in Poland.

5. Early recognition of the rules of taxonomy and CSRD can give entrepreneurs a competitive advantage in the common market. Failure to understand these rules exposes them to penalties, probably financial, but more importantly it can result in exclusion from the market whether by the regulator or by very environmentally conscious consumers. Certainly, failure to meet the conditions of the taxonomy will exclude the entrepreneur from the group of potential beneficiaries of EU funds. It will also exclude contractors who provide services financed with these funds or suppliers of goods purchased with these funds.
6. The scale of the challenge and the fact that the practical part of the national regulation is still being drafted allows for demands and proposals to be made. It is not quite accurate to identify accounting auditors as competent to audit CSRD reports in terms of ESG. They are not prepared to do so, especially from the environmental side. Given that such a law is likely to come into force in the summer or autumn of 2024, there will be little time left for accounting auditors to get further training or to find the support of consultants, who are view available at the market. It needs to be checked, on an industry-by-industry basis, which taxonomy criteria can be verified using GIS instruments. In the same way, it is necessary to think about how to use AI in the process of verifying the environmental effects of business activities. That businesses will use AI to embellish their reports for sure, but AI should serve a good purpose. There is still a chance to plan this one.

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