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EU Taxonomy as a Game-Changing in Sustainability

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Abstract

The focus of this paper is to understand how firms are responding to the EU taxonomy; find out what strategies they have in place; explore relationships between company responses to certain aspects of the market and with various stakeholders.

The importance of the EU taxonomy is given by its role in helping the implementation of the European Green Deal by creating a green classification system, establishing a list of environmentally sustainable economic activities. It is a transparency tool that introduces mandatory disclosure obligations in relation to three indicators: capital expenditures, operating expenditures, and turnover. This mandatory disclosure is applicable to financial institutions that offer financial products on the European market and to all large companies with more than 500 employees. According to the European Commission, this reporting obligation covers 11,700 large companies and groups across the EU.

The major added value of this material is given by the novelty of the topic and its implication in the medium and long term in relation to a sustainable marketing strategy of the companies. Another added value is understanding how businesses react to the EU taxonomy in terms of methodology for publicly disclosing the KPIs.

Keywords: sustainable marketing, EU taxonomy, stakeholder response, Green Deal.

JEL Classification: M 31, Q56.

1. Introduction

Pollution and environmental concerns have been discussed since the nineteenth century. Even back then, some entrepreneurs believed that pollution prevention, recycling, renewable energy, and supplying good food were their responsibilities (Rosen, 1995; Jones, 2017a; Berghoff, Rome, 2017; Bergquist, Lindmark, 2016).

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As an initial reaction to industrialisation, early attempts toward pollution control and the establishment of green firms were done, but a much broader and more effective social movement did not develop until the 1960s. The late 1960s environmental awakening mobilised a mass movement and the formation of new institutions, including a complex of laws and organisational structures to safeguard the environment (Brenton, 1994; Jones, 2017a). This environmental awakening was accompanied by harsh criticism of the business community (Carroll et al., 2012; Rome, 2017). Environmental regulation has become an important issue for polluting companies with operations in western countries (Bergquist, 2017).

The new Green Deal comes with a common driver: the necessity of an economy-wide Net Zero transition for Europe, with a share of the same principles in setting sustainability disclosure policies and implementing standards: transparency, uniformisation, cohesion, and comparability (European Commission, 2021).

The aim of this paper is to understand how large companies are responding to the EU Taxonomy due to the novelty of the topic. Taking into consideration that sustainability is the "21st century mantra" (Dyllick, Hockerts, 2022) and is facing now more concrete dimensions, the EU taxonomy is only one of these, a mandatory disclosure obligation in relation to three indicators: capital expenditures, operation expenditures, and turnover (Brito et al., 2008).

This paper is one of the few that investigated the how large companies are responding to the EU taxonomy in relation to the medium- and long- term climate targets, by using 10 Romanian BET companies and 10 regional oil and gas companies as case studies.

2. Literature Review

The twentieth century is inimitable in human history, due to the huge technological achievements and growth in living standards, and for the significant increase in the number of environmental challenges (McNeill, 2000; the United Nations, 2016). Industrial capitalism, international companies, and globalisation have played key roles in this evolution (Nyberg, Wright, 2015).

The climate topic, the link between the use of fossil fuels and the Earth's atmospheric temperature, was pointed out by the Club of Rome. Climate change had gained some traction by 1991 (Kirby et al., 2021). The Kyoto Protocol from 1997 codified consensus on problem acknowledgement, recognising the Anthropocene as an epoch in which human activity has damaged the planet's natural ecosystems and attempting to persuade member governments to stabilise greenhouse gas emissions. However, the Kyoto Protocol was stopped by the 2008 global financial crisis as nations resorted to budgetary restraint. The Paris Climate Change Agreement, signed at COP21 in 2015, served as a successor to the Kyoto Protocol. It has more than 190 signatories and was the first legally binding climate change effort. Its justification was based on agreement on the need to address the effects of global warming and restrict the increase in atmospheric temperature to 1.5 ^{o}C, a safe operating temperature that maintains the resilience of similar ecosystems.

The Sustainable Development Goals (SDGs) of the United Nations address broader contemporary sustainability challenges. Every country is called upon to provide solutions through its governments, corporations, and societies. The global character of human effects on the environment (Rockström et al., 2009), social inclusion and equity (e.g., Raworth, 2017), and good governance of business and civil society (SSDN, 2021) are all implied in the SDGs.

The six transformations identified by Sachs et al. (2019) provide guidance on how the SDGs might be implemented through investments, policy implementation, and regulation by governments, corporations, and societal organisations in order to dive the transformation. These changes reflect the sustainability principles developed by Gladwin et al. (1995), which include equity, prudence, comprehensiveness, connectivity, and security. It is implicit in these principles that we cannot understand sustainability in organisations without first taking into account the socio-ecological systems in which those organisations are embedded. Businesses are essential to these changes.

Researchers such as Weber (2007) have drawn attention to corporate responsibility for biodiversity loss, climate change, and social inclusion. The prevailing business mentality continues to be one of economic expansion despite mounting calls for change (Schoenmaker, Schramade, 2018). According to Jensen and Meckling (1976), firms are merely entrepreneurial by-products of market flaws.

The Triple Bottom Line (TBL) concept proposed by Elkington (1997) marked a major turning point in efforts to build harmony between the environment, society, and business. Striking a balance between profit, corporate social responsibility, and the environment is a central idea of TBL theory, and the Global Reporting Initiative (GRI) has put this idea into practice (Elkington, 1997). During that time, corporate growth was aided by the financial system, and now environmental (E), social (S), and governance (G) issues have become an advantage to the extent that voices for a degrowth approach to economic development have grown louder (Kirby et al., 2021).

The European Green Deal (EGD) has been projected as a mission for Europe to become the world's first Net Zero continent by 2050, and to strengthen European cohesion through this ambition (European Commission, 2020). This ambition can only be successful if it comes with concrete progress in improving living conditions for European citizens at large (Wolf et al., 2021).

To achieve the ambition by 2050, a significant acceleration of emission reductions is needed, which is by far the most ambitious international arrangement currently existing. There are some criticisms of this policy package that addresses climate change through a "just and inclusive" transition, that to make Net Zero Europe's production systems, this will require a broader range of 'green' industrial policies to address environmental sustainability, structural change, and the fairness of economic outcomes in Europe (Pianta, Lucchese, 2020).

As a result of the criticisms related to the absence of official political constraints that can push governments to implement a Green Deal agenda, difficulties were created in making Net Zero Europe's production systems (Pianta, Lucchese, 2020);

a broader range of 'green' industrial policies were created that should jointly address environmental sustainability, structural change, and fairness of economic outcomes in Europe. The next step was to provide companies, investors, and policymakers with appropriate definitions for which economic activities can be considered environmentally sustainable and a similar classification system for what are sustainable activities. The EU taxonomy has a major role in helping the implementation of the European Green Deal by creating a green classification system, establishing a list of environmentally sustainable economic activities. It is a transparency tool that introduces mandatory disclosure obligations in relation to three indicators: capital expenditures, operation expenditures, and turnover for sustainable activities/projects.

Previous research has revealed that the EU Taxonomy is a working method, based on cooperation among regulators, academics, and industry (Lucarelli et al., 2020). The most important is that the EU taxonomy is a general European regulation applicable to all EU countries, no translation into national legislation is needed. Now that EU Taxonomy-related topics have been incorporated into policy measures, further positive environmental effects are expected from here on out (Lucarelli et al., 2020).

3. Research Methodology

The present paper aims to explore whether companies in scope of the EU taxonomy have set out strategies, key performance indicators to comply with the new regulations. The research methodology is exploratory, based on secondary data. This paper is an important research tool, providing a valuable answer to the question: is the EU taxonomy a game changer in sustainability? To collect data to understand how companies in the scope of the taxonomy regulation complied with their requirements during the first 18 months of application, the analysis was performed on the nine most liquid and best performing listed companies in BVB and 10 major regional oil and gas players. The companies targeted are within the scope of the EU taxonomy, e.g., more than 500 employees, listed companies.

To gather information for the analysis of the 10 well-known BET Romanian companies, we performed desk research that involved analysis of their websites, the sustainability strategy, the corporate strategy, the non-financial report for 2021 and 2022, the annual report for 2021 and 2022, the last materiality matrix, disclosure related to the EU Taxonomy key performance indicators and major activities.

In the case of the first 10 Romanian BET companies (Cojoianu, 2023), sustainability reports for 2022 have not yet been published (www.banca transilvania.ro, www.romgaz.ro, www.brd.ro, www.transgaz.ro, www.electrica.ro, www.transelectrica.ro, www.bvb.ro, www.conpet.ro). According to Romanian legislation, the deadline to publish nonfinancial data is June 30. The only BET companies that published sustainability data are Nuclearelectrica and OMV Petrom (Petrom). In 2022, Nuclearelectrica claimed 100 % aligned turnover and CapEx. The main aligned activities are the production of electricity from nuclear energy in existing installations. The aligned CapEx is in line with its medium-term goals:

to supply 66 % of Romania's clean energy after 2031, to avoid 10 million tons of CO_2 every year with current operation.

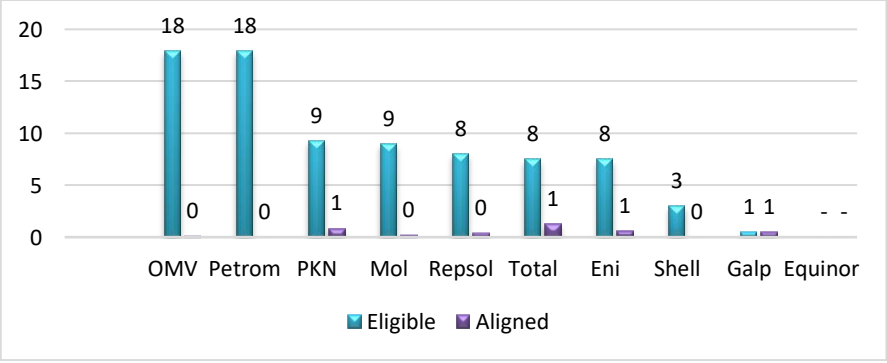
For the same timeframe, OMV Petrom claimed only 0.41 % aligned CapEX. According to the newly released non-financial report, the aligned CapEx is generated by the following three activities: electricity generation from solar photovoltaic technology, infrastructure for low carbon road transportation, and installation, maintenance, and repair of renewable energy technologies. These activities are correlated to the OMV Petrom 2030 Strategy and the new targets for increased capacity to operate more than 1GW of renewable power capacity, to create 500 charging points for alternative fuelled vehicles.

The rest of the eight well-known Romanian BET companies, 2022 sustainability, non-financial report has not been released yet, but only six of them have sustainability strategies, CSR focus areas, or targets published on their websites. Only 4 out of 10 companies are mentioning EU Taxonomy in their reports, annul or sustainability, and only two of them are publishing in 2021 and 2022 the mandatory KPIs.

In the case of the nine major regional oil and gas players, all of them have a sustainable strategy, short-, mid-, and long-term targets, and ambition to become Net Zero by 2050. The aligned CapEx allocation for sustainable activities ranges from 0.41 % to 34 %. In terms of eligible, more general conditions to be checked, the percent of CapEx ranking starts at 3 % and ends at 44 %.

The taxonomy KPIs presented by Shell (2022) are voluntary, but the company chose to take a 'prudent approach' to publish zero alignment for 2022 due to 'At present, there is a lack of consensus in the market about how to interpret various aspects of technical screening criteria'. However, the company assessed elements of some activities related to solar, wind, hydrogen, low carbon road transport, and renewable energy technology activities, not fully aligned, but the estimate "when fully aligned, this would result in a range of" 0.1-0.2 % for turnover, and 9-10 % for capex".

Figure 1. The Percentage of Turnover eligible/aligned out of total turnover/company



Source: Annual reports, Sustainability reports of the companies analysed (www.omv.com, www.omvpetrom.ro, www.molgrouo.info, www.repsol.com, www.totalenergies.com, www.eni.com, www.reports.shell.com, www.galp.com, www.equinor.com)

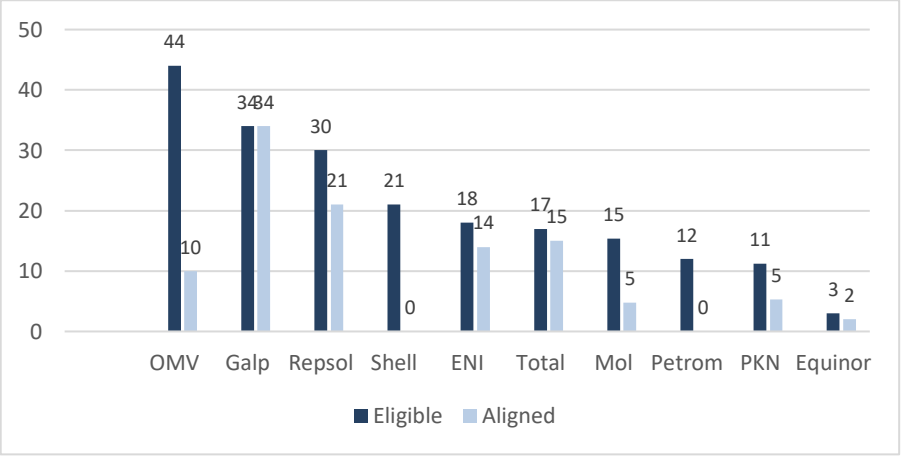
The above figure shows the eligible (the basic conditions for EU taxonomy) and aligned (the sustainable activities from the EU taxonomy perspective) turnover. It is important to mention that, according to public reports, for OMV and Petrom, the eligible turnover comes from the power plant activity. In 2022, neither company has aligned its activities.

The above table shows that 4 companies, PKN, Total, Eni, and Galp, have a low percentage of eligible turnover based on the EU taxonomy methodology. The eligible turnovers come mainly from the manufacture of organic basic chemicals, manufacture of plastics in primary form, energy generation from hydropower, bioenergy, manufacture of biogas and biofuels, and power plants.

The aligned turnover is generated by activities mainly from activities like electricity generation wind, manufacture of biogas and biofuels for use in transport, manufacture of plastics in primary form, and material recovery from non-hazardous waste.

The gas is a new entry in the EU Taxonomy, and it was included with very high criteria to meet for alignment. Simplifying the process of alignment means activities/ projects with very low GHG emissions that do not significant harm sustainable use and protection of marine resource, protecting the biodiversity, transition to circular economy, and pollution prevention.

Figure 2. the Percentage of CapEX eligible/aligned out of total CapEx/company



Source: Annual reports, Sustainability reports of the companies analysed (www.omv.com, www.omvpetrom.ro, www.molgrouo.info, www.repsol.com, www.totalenergies.com, www.eni.com, www.reports.shell.com, www.galp.com, www.equinor.com).

In the case of the ten major regional oil and gas players, we observed that the largest investment in sustainable activities defined according to EU taxonomy is 34 % of the total CapEx and the lowest is close to zero. The largest investments are for projects dedicated to photovoltaic technology for 9 of 10 companies analysed, the second ranked are the projects focused on wind power, and the third placed in this evaluation are the activities for the manufacturing of organic basic chemicals.

Table 1. Summary of EU Taxonomy-aligned activities for 10 major regional oil and gas players and % of CapEx

EU Taxonomy defined activity / Proportion of CAPEX aligned	OMV	Galp	Repsol	Shell	ENI	Total	Mol	Petrom	PKN	Equinor	Total
Manufacture of hydrogen and hydrogen-based synthetic fuels	0,1	0,2	0,1				0,5				**0,8**
Manufacture of organic basic chemicals	5,8						1,9		3,9		**11,6**
Manufacture of plastics in primary form			0,3				0,5				**0,8**
Transmission and distribution of electricity	0,3										**0,3**
Electricity generation using solar photovoltaic technology	0,2	31,0	12,0		4,9	13,3	0,5	0,1	0,1	0,7	**62,6**
Electricity generation from wind power	0,6	0,5	5,0		7,3					1,0	**14,4**
Electricity generation from bioenergy									0,0		**0,0**
Transmission and distribution of electricity									0,9		**0,9**
Storage of electricity			0,2								**0,2**
Manufacture of biogas and biofuels for use in transport and of bioliquids	0,3	0,8	3,0		0,8	0,6			0,4		**5,8**
Transmission and distribution networks for renewable and low-carbon gases							0,2				**0,2**
Production of heat/cool using waste heat	0,2										**0,2**
Underground permanent geological storage of CO_2			0,0		0,6						**0,6**
Infrastructure enabling low-carbon road transport and public transport	0,1		1,0		0,5		0,1	0,2	0,1		**1,9**
Transport by motorbikes, passenger cars and light commercial vehicles							0,1				**0,1**
Installation, maintenance and repair of energy efficiency equipment							1,0				**1,0**
Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)		0,8									**0,8**
Installation, maintenance, and repair of renewable energy technologies	0,2	0,3	0,2					0,2			**0,9**
Close to market research, development, and innovation	1,9										**1,9**
Research, development and innovation for direct air capture of CO_2			0,0								**0,0**
Other						0,6					**0,6**
Total	**9,5**	**33,6**	**21,5**	**0**	**14,1**	**14,5**	**4,8**	**0,4**	**5,3**	**1,7**	

Source: Annual reports, Sustainability reports of the companies analysed (www.omv.com, www.omvpetrom.ro, www.molgrouo.info, www.repsol.com, www.totalenergies.com, www.eni.com, www.reports.shell.com, www.galp.com, www.equinor.com).

4. Results and Discussion

The application of the EU taxonomy is still at the beginning, and the companies were not prepared for these legal obligations.

From the data analysed, it is relevant to emphasise that the 10 regional oil and gas players have sustainable goals, short-, medium- and long-term climate targets, and Net Zero ambition to Net Zero by 2050. They have also publicly disclosed their turnover, CapEX, and OpEx using the EU taxonomy methodology, even though the figures are small. The existence of a journey to meet intermediary and long-term targets and the EU taxonomy obligations will help those companies adjust their strategy to have more activities aligned with the EU taxonomy. This helps them in their transition plan to a low- and zero-carbon business.

In Romania, only 5 of the 10 BET companies analysed at this moment have publicly disclosed sustainable goals, climate targets, and all are expected to publish the non-financial report by June 30. Only a very few of them are publishing the EU taxonomy requested KPIs.

Hypothesis: Companies that disclose the indicators required by EU taxonomy are more willing to adapt the way they reach the targets in the sustainability strategy.

EU regulators also introduced another principle for the EU taxonomy disclosure to prevent myopic investment processes that would focus on a particular environmental or social objective. The principle of Do No Significant Harm (DNSH) is to prevent narrow-minded investment processes that focus on a particular environmental or social objective without sufficient consideration for other objectives. DNSH will ensure that companies doing well on one environmental aspect meet a minimum baseline standard across others (Bloomberg, 2023).

5. Conclusions

In the last decades, big companies, multinationals, analysis represented a major interest and dominated the literature on international marketing (Brandenburg et al. 2014) and their impact on sustainability and their Net Zero ambitions (Ahola et al., 2020; Cowan, Guzman, 2020).

At this embryonic stage in the taxonomy lifecycle, the academic community has the potential to contribute to understanding its implications and companies to adjust their business models and support Europe's ambition to become the first continent to reach Net Zero. The Green Deal is the most ambitious legislative package for Europe and will drive the low-zero journey while fostering cooperation throughout the continent (Wolf et al. 2021).

In conclusion, large companies need more effort to succeed in implementing climate targets and meeting their EU taxonomy obligations.

This research provided favourable support for the established hypothesis. Based on the significant attention paid to sustainability in terms of concrete examples and measurements, it seems not easy to pledge Net Zero without a clear path. In addition, it is not sufficient for a company to take only the objective into consideration in this journey, DNSH and the minimum safeguard criteria must be included in sustainable

activities. In order to address issues such as climate change, biodiversity loss, water scarcity, etc. While simultaneously dealing with major social and economic challenges, the EU taxonomy is a tool that may be used to adapt traditional economic models (Söderholm, 2020).

Future research should aim at providing yearly analyses of the companies to measure the progress in terms of alignment percentage and type of activities under the EU taxonomy. Although our research is not without limitations, it provides information for academics, researchers, and practitioners as they begin reporting on EU taxonomy.

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