European journal of volunteering and community-based projects Vol.1, No 3; 2021
ISSN: 2724-0592 E-ISSN: 2724-1947
Published by Odv Casa Arcobaleno

The impact of the COVID-19 on policies and investments of the European Green Deal.

Paolo Biancone

Department of Management, University of Turin, Italy

paolo.biancone@unito.it

Valerio Brescia

Department of Management, University of Turin and DISEI Department, Department of Economics and Business Studies, University of Piemonte Orientale "Amedeo Avogadro", Italy

valerio.brescia@unito.it

Vahid Jafari-Sadeghi

Aston Business School, Aston University, United Kingdom

v.jafari-sadeghi@aston.ac.uk

Abstract: The paradigm generated on world systems and models by COVID-19 has led to the search for new solutions. The European Commission has generated and strengthened the previously defined sustainability and Green Deal policies. The NextGenerationEU fund could incentivize the application and adoption of the actions. The analysis intends to analyze how COVID-19 changed policies undertaken before the pandemic and how these were redefined. A content analysis (CA) technique, through LEXIMANCER software, is adopted to answer the research questions considering articles collected by the Business Source Ultimate platform from February 2020 to June 2021 in Europe. The analysis identified 35 key concepts that describe the path and approach that influenced and guided the new Green Deal policies. The analysis identifies the main areas on which an impact is expected and the confirmation or variation of the approach.

Keywords: Green Deal, NextGenerationEU, COVID-19, content analysis

Doi: 10.5281/zenodo.5535401

European journal of volunteering and community-based projects Vol.1, No 3; 2021
ISSN: 2724-0592 E-ISSN: 2724-1947
Published by Odv Casa Arcobaleno

1. Introduction

On 14 July, the European Commission adopted a series of proposals to transform EU policies on climate, energy, transport, and taxation to reduce net greenhouse gas emissions by at least 55% by 2030 compared to 1990 levels. It is essential to reduce emissions over the next decade to make Europe the first climate-neutral continent by 2050 and translate the European Green Deal into a concrete reality (Montanarella & Panagos, 2021). The European Commission has defined a roadmap of key points that should be developed. Themes involve clean air, water and soil, and biodiversity, energy-efficient buildings, affordable healthy food, more public transport, clean energy and technological innovation for clean energy, longer-lasting products and recycling, adequate jobs and training, and competitive and resilient industry (European Commission, 2019; Sukumar et al., 2020). The European Green Deal is also a lifeline for us in terms of escaping the COVID-19 epidemic. The pandemic had already pushed technological development and the adoption of new approaches and immediate changes in production systems with greater efficiency, demonstrating the ability of companies to respond to the needs of the context (European Union, 2020). The European Green Deal will be funded with a third of the € 1.8 trillion investment in the Next Generation EU recovery plan and the EU's seven-year budget. The theme of environmental sustainability, the green deal and the impact of the policies adopted will have a consequent impact on the well-being of the population and on the impact of community behavior by launching new decision-making and cognitive processes and new public interest-oriented projects involving all sectors across the board (Brescia, 2020).

Automated content analysis of 178 articles related to magazines and journals was conducted to identify priorities and short-term responses. The use of LEXIMANCER on environmental issues such as the adoption of Green Deals policies is in fact more relevant than the scientific articles, applications and changes (Nunez - Mir et al., 2016). The analysis conducted focuses on the short-term effects of the pandemic crisis and the future change of economic and political models and paradigms in progress (Campra, Esposito, & Lombardi, 2020; Campra, Esposito & Brescia, 2020; Campra et al., 2021). The president of the European Commission Ursula von der Leyen highlighted how the pandemic influenced and pushed change during the Berlin Energy Transition Dialogue: "The European Green Deal is as important today as it was before Covid, indeed, it has become even more important ". Therefore, the study intends to answer two questions:

RQ1: Has COVID-19 affected the effective implementation of Green Deal policies?

RQ2: What priorities related to COVID-19 have been given in Europe with respect to Green-Deals policies?

The result intends to provide starting tools for understanding changes and priority elements of policies.

The next section analyzes the Green Deal policies and the relationship with the Next Generation EU Found. Subsequently, the methodological approach guarantees the replicability of the results and focuses attention on the choices made. The third section highlights the results of the automated content analysis which are explained by defining evidence in the fourth section. The last section answers the research questions by relating what was politically planned and what was adopted or given precedence. Research limitations and ideas for future analysis are explicit.

2. Green Deal Policy and Next Generation EU

The reduction of emissions envisaged by the European Commission defined on 23 and 24 October 2014 provided a reduction of at least 40% domestic reduction in economy-wide greenhouse gas emissions by 2030 compared to 1990 (EU, 2018). The start of the policy activities had already started in March 2016. The European Commission sent a document dubbed the European Green Deal (EGD) to the European Parliament and the Council on December 11th, 2019. The EGD was essential in the Von der Leyen Commission's approval and political agenda (Claeys, Tagliapietra, & Zachmann, 2019). During Von der Leyen's first 100 days in office, it was the most heavily lobbied topic in Brussels (Von der Leyen, 2019; Abels & Mushaben, 2020). The EGD is described as a "growth plan aimed at transforming the EU into a fair and affluent society with a modern, resource-efficient, and competitive economy" by 2050. (European Commission,2019, p. 2). The Green Deal proposes some pillars formed by a series of macro-actions containing strategies for all sectors of the economy, particularly transport, energy, agriculture, construction, and industrial sectors such as steel, cement, textiles, and chemicals. Furthermore, through specific funds, the reduction of the consumption of fossil fuels and the transition to less-polluting technologies was sought in addition to the proposal of a 'law for the climate' to make irreversible the path towards a zero-emission Europe in 2050 and a plan to increase the EU emissions reduction targets from 40%

to 50-55% by 2030 (Birindelli & Chiappini, 2021; Secinaro et al., 2020a). The law is associated with the launch of the European Climate Pact, followed by the proposal of the eighth action program for the environment 2020. The European Commission also proposed a plan that provides resources to support the circular economy through neutral markets focused on textiles, construction, electronics, plastics, specific legislation on the reuse and recycling of batteries, and a vast reform on waste (Zhong et al., 2020; Whiteman et al, 2011; Halluite et al.; 2005). The policies conceived also embrace sustainable and smart mobility through proposals for sustainable alternative fuels, combined transport, better use of water and rail transport, more restrictive policies for road transport and related emissions (Secinaro et al., 2020; 2021). The "Farm to Fork" policy also encourages the direct production chain to reduce the use of chemical pesticides, fertilizers, and antibiotics. The last topics dealt with the protection of biodiversity and deforestation. Several academics (European Commission, 2019; Ossewaarde & Ossewaarde-Lowtoo, 2020; Leonard et al., 2021). Disagree with the EGD's goal of decoupling economic growth from resource inputs. The European Commission's commitment to a just, inclusive, and people-centred transition is also mentioned in the EGD (European Commission, 2019). Several studies show that transitions are deeply political, requiring consideration of power relations and vested interests within energy systems (Rosenow & Eyre, 2013; Pettifor, Wilson & Chryssochoidis, 2015), examining the impact of deploying renewables and gas infrastructure to grow industrial output and consumption and scrutinizing ownership of the means to producer (Ziabina & Pimonenko, 2020; Brahmana & Kontesa, 2021). Furthermore, social opposition to sustainability agendas emphasizes the importance of recognizing the socioeconomic impacts of green transitions, as well as the disparity between workers' concerns about meeting the "end of the month" versus the climate community's demand to avoid the "end of the world" (Martin & Islar, 2021). In this context, Green New Deals (GNDs) offer an alternative to climate change mitigation by focusing investments on vulnerable, marginalized, and frontline communities and promoting "egalitarian policies that prioritize public goals over corporate profits" (Pettifor, 2020). Mastini, Kallis, and Hickel (2021) found that little attention has been paid to the fact that the content and framing of GNDs has altered through time in their research of brief histories of GNDs. An ecological modernization paradigm based on investments in technical solutions is dominant in what they refer to as GND 1.0. This framework is described as a technocratic exercise aimed at reviving capitalist investments by allocating

financial resources to research and development, light subsidies, and carbon pricing (Mastini et al., 2021). In this way, the ‘GND 1.0' narrative can be linked to a neoliberal approach to climate politics in the sense that it advocates market-friendly regulation, market stabilization, and resource mobilization and capital accumulation. Mastini et al. (2021) used the term "GND 2.0" in the aftermath of the G20's growth-friendly budget consolidation in 2010 when 16 of the G20's member nations failed to meet UNEP's 2009 proposal of spending only 1% of GDP on green initiatives. The ‘GND 2.0' “rejects the primacy of market-based environmental policy instruments” that view our current ecological meltdown as a market failure that can be fixed through pricing, rather than a social crisis that can only be addressed by redistributing economic and political power (Mastini et al., 2021). As a result, the ‘GND 2.0' adopts command-and-control environmental regulation while prioritizing decarbonization in terms of speed, scale, and breadth through leveraging public investment and coordination (Aronoff et al., 2019; Falk & Hagsten, 2020; Palea & Drogo, 2020). Across the Atlantic, H. Res. 109 declares the US government's responsibility to create a GND to achieve zero net greenhouse gas emissions through a fair and just transition for all communities and workers; create millions of good, high-wage jobs and ensure prosperity and economic security for all; and invest in infrastructure and industry to meet the challenges of the twenty-first century in a sustainable manner (Samper, Schockling, & Islar, 2021). The discrepancy between intentions and reality leads to researching what has actually been implemented especially in a period of pandemic crisis in which the influence and incidence of COVID-19 could have significantly influenced the policies adopted. Due to the flu caused by Covid-19, the European Commission, the European Parliament, and EU leaders have agreed on a recovery plan that will help the European Union repair the economic and social damage caused by the coronavirus health emergency and help lay the foundations to make the economies and societies of European countries more sustainable, resilient and prepared for the challenges and opportunities of the ecological and digital transition. On 18 December 2020, Parliament and the Council reached a final agreement on Next Generation EU, the 750 billion euro program for the relaunch of an EU economy overwhelmed by the pandemic crisis. Next Generation Eu (NGEU) is a tool for relaunching the EU economy from the crash of Covid-19, incorporated in a seven-year budget 2021-2027 worth approximately 1,800 billion euros (750 from Next Generation plus over 1,000 billion budget). The instrument is closely correlated with the EGD and GND policies as 30% of European funds will

be reserved for it and is tied to the fight against climate change, the highest percentage ever for the EU budget.

3. Sample and Research Method

The Leximancer text analysis program was utilized in this study to find statistical algorithms and compare important themes in news articles. Leximancer is a software system that uses mathematical methods to find, define, and illustrate links between concepts (Leximancer Pty Ltd., Brisbane, Australia). Leximancer is a technique for "unsupervised translating lexical co-occurrence information from real language into semantic patterns" (Smith and Humphreys, 2006, p.262). The Leximancer system uses an automated content analysis (ACA) technique in which the thesaurus is utilized as a classifier and the resulting co-occurrence data is used to produce concept maps (Jafari-Sadeghi, 2021; Smith and Humphreys, 2006). Themes are represented as heat maps, with intense colors like red and orange indicating the most essential topics (Leximancer, 2018). Clusters of concepts are displayed, each of which is surrounded by a colored circle that represents a theme. The distance between two concepts reflects how frequently they arise in similar mental situations, while the linkages between concepts show the most likely relationship between concepts (Sotiriadou et al., 2014). Leximancer version 4.5 was used to complete the ACA since it included a number of unique features for analysis and visual display (Leximancer, 2018). It was also chosen above other software because of a body of work that supported and validated Leximancer's capabilities (e.g. Cretchley et al., 2010; Crofts and Bisman, 2010, Smith, 2003; Smith and Humphrey's 2006; Penn-Edwards, 2010). The stability and reproducibility of Leximancer make it trustworthy (Verreynne and Parker, 2011; Middleton et al., 2011). Additionally, the program's ability to reliably identify text in the same way across multiple analyses illustrates its consistency (Jafari-Sadeghi, et al., 2020; Smith and Humphreys, 2006). It also allowed researchers to quickly identify concepts with little manual intervention, which is a limitation of manual coding tools like NVivo or ATLAS (Wilk et al., 2019; Lemon and Hayes, 2020). There are two more advantages to adopting ACA versus manual review. First, given the timeframes and resources available, it allowed us to review a far bigger amount of entries than we could with a manual review. Second, completing an ACA helped to eliminate human subjectivity that might arise when determining whether a report is an accurate and full portrayal of the

comments received during a public review. If the increased exploitation of gas was a resource already included in the EGP for the industrial sector (Ziabina & Pimonenko, 2020), it is flanked by some alternatives on which the significant incentives and plans have been launched.

3.1 Automated content analysis two-stages process

A two-stage approach was used to analyze the data. The two-step approach and the use of the LEXIMANCER program follow the approach adopted by Martin & Rice (2010), Stewart & Gapp (2014) Massaro et al., (2021). The data cleaning process was the initial step, which deleted any unneeded or irrelevant information. All sources that could represent the short-term effects on Green Deal decisions following COVID-19 were selected. The keywords used to search for sources are "green deal" and "green new deal". The sources were selected by the Business Source Ultimate platform from February 2020, start of the pandemic period in Europe (Campra, Esposito & Brescia, 2020), to June 2021. Database containing full text and bibliographic citations of articles taken from over 3,500 scientific, economic, and social science periodicals (2,000 peer-reviewed) and numerous other specialist sources. It also gives 40,000 other specialist sources, including e-books, Company Profiles, SWOT analyses, Industry Reports (including those published by Datamonitor), Case Studies, and Market Research Reports. Allows navigation by subject through a Thesaurus created by EBSCO specialists. It also provides detailed information on over 1 million public and private companies. From the first screen, it is also possible to select the Econlit with Full Text and Historical Abstracts with Full-Text databases to consult the databases simultaneously. The time frame represents the response and potential effect of the pandemic crisis on Green Deal choices. Initially, the platform found 822 sources, including national reports, conference proceedings, scientific articles in open access, magazines, and newspapers. The selection of sources from English-language magazines and newspapers reduced the sources to 478, of which only 396 in full text. The analysis of the abstracts excluded duplication and sources not strictly related to the European context. The final results are 173. The results were then imported into Leximancer, where concepts (i.e. a set of weighted terms) were automatically constructed without any changes, resulting in an impartial list of concept seeds (i.e. the most often occurring words in the text) (Smith and Humphreys, 2006; Secinaro et al., 2021a). This initial evaluation assisted in identifying seeds that were either irrelevant or did not provide value to the concept

seeds created (e.g. report title, subheadings, inquiry location, references, etc.). The text classification for each concept seed was examined in the second stage. Even though the correctness of Leximancer's weighted single words has been proven (Smith and Humphrey, 2006; Penn-Edwards, 2010), an iterative manual validation method was used to identify any conceptual disparities between the results and submissions. First, all text segments inside the created concepts were retrieved. The text segments within each notion were carefully read to determine whether the document part was accurately categorised. Concepts that were identified as erroneous or inaccurate were highlighted and examined during this procedure.

4. Results

In the first stage of the analysis, Leximancer discovered 35 primary concepts with an absolute concept count range of a maximum of 273 "plan" (69%) and a minimum of 45 "oil" (11%). The data is net of the two key concepts identified relating to the EUROPEAN context (present in 100% of the sample) and COVID expressly present in 32% of the sample. As can be seen from the clusters (Figure 1), European policy is closely linked to energy management, considering both the carbon emission market and sustainable investments. The other clusters depend on single macro groups. The EU cluster is closely related to the response to COVID. The lockdown highlighted how in many areas of the world, reducing production has led to cleaner air. Therefore, Europe's intention is not to reduce production but to change the production process with a zero-pollution approach. The Green Deal promises to reduce EU greenhouse gas emissions to zero by the middle of the century, in a massive environmental clean-up that will impact everything from energy production to agriculture and city planning. The European cluster is significantly conditioned by food emission, production, and management policies and consequently to the economy of sustainable investments to prevent carbon emission. The cluster of energy, in turn, is associated with management in the pandemic and post-pandemic period and with European policies and is conditioned by debates related to the period of transition and accompaniment towards clean energy (wind, photovoltaic, and gas), the debates on the use of nuclear energy and the emission policies of companies.

European journal of volunteering and community-based projects Vol.1, No 3; 2021
ISSN: 2724-0592 E-ISSN: 2724-1947
Published by Odv Casa Arcobaleno

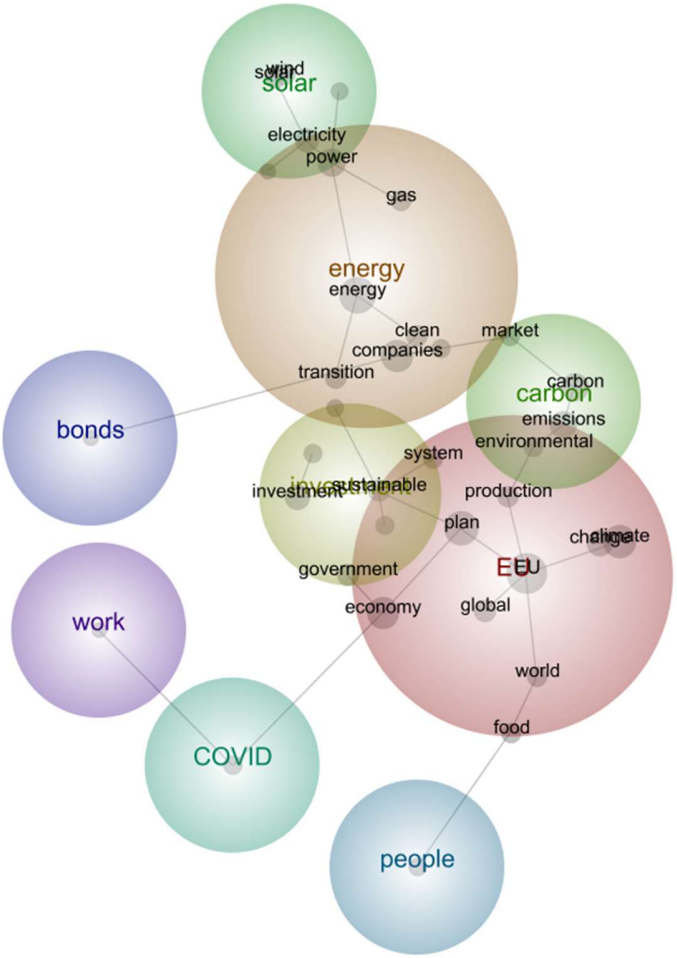

Figure 1 Themes, concepts and concept map for the Green Deal in Europe

European journal of volunteering and community-based projects Vol.1, No 3; 2021
ISSN: 2724-0592 E-ISSN: 2724-1947
Published by Odv Casa Arcobaleno

5. Discussion

The section explores the content of the results obtained by LEXIMANCER. Through the relationships previously detected and the clusters, the second stage allows to determine the issues and policies on which short-term effects caused by the pandemic have been experienced. The priority for European policy associated with the Green Deal and recall from the Next Generation EU focus on relaunching sustainability. However, the frustration of various leaders unable actually to achieve the objectives aimed at avoiding climate change is evident from various sources. However, the analysis of the results reveals that we are not completely at the starting point concerning previous agreements on climate and environmental protection. For example, between 1990 and 2018, the EU reduced greenhouse gas emissions by 23%. The need to relaunch environmental and climate sustainability policies was, in fact, already restarted by Ursula von der Leyen during the UN climate conference in Madrid, promising that Europe would become the world's first carbon-neutral continent within the next 30 years. The relaunch of a sustainable policy occurred when President Donal Trump left the Paris Climate Accord, and at the same time, China, one of the leading producers of pollution, defined expansion plans. Therefore, European policies will be correlated with prospects at a global level and will affect the different world visions. However, the short-term period that began with the spread of the pandemic could have conditioned the debate and the policy choices undertaken.

The energies adopted are among the main priorities dealt with to bring about the transition of companies towards clean perspectives. One of the main topics of interest in the debate appears to be Hydrogen, which can store renewable energy and be a raw material in energy-intensive industries, such as the steel sector. The issue is particularly delicate because it affects all those companies that during the twentieth second have produced thanks to combustion plants that used coal, oil, gas, and fossils and that still several workers. Policies are therefore figuring out how to re-employ the many workers employed in the sector. One of the main themes is the real change in the energy consumption of European cities. Buildings account for 40% of energy use, and the goal is to renovate 3% of buildings annually in the EU over the next decade. The Energy Performance

of Buildings Directive is a piece of EU legislation that sets out requirements for energy efficiency in buildings. Europe is taking an example from Canada which has already initiated this type of policy. Europe intends to invest as already done in Australia and Canada in hydroelectricity and the exploitation of natural gas. Parallel to the identification and investments in renewable energies, debates on the harmfulness of nuclear energy have begun in some states, including Germany.

The different European nations have initiated various actions aimed at governing the complicated economic period. While the exit from the pandemic could mark the end of a crisis not only social but also economic, it is true that it has deprived the various states of strength to evade the commitments made with the Green Deal. In such a difficult moment, European nations have the opportunity for economic revitalization to consider the priorities of the Green Deal as part of the solution. The European Commission and the international debate highlight how the recession and the possibility of a cohesive policy of European reinvestments can guarantee a decisive change. It mainly involves Germany, France, Italy, Austria, and Spain, overcoming each nation's previously detected blocks. Unfortunately, in reality, many states and industries, instead of respecting and orienting choices towards the Green Deal due to lost revenues during the pandemic, have cancelled what was planned. The founder of the Solar Impulse Foundation highlights how these choices go against the prospect of reviving the economy and new job positions. Globalization has led to changes that have somewhat damaged the sustainable policies implemented. It is highlighted that the states with the most advanced technologies, China, Russia, the United States, India, Japan, are instead boycotting the financial power of London capable of imposing the Green Deals desired instead by Europe and North America.

The Green Deal is based on sustainable energy policies; during the period, numerous newspapers question which energies to invest more in based on the power generated. Energy efficiency refers to the efficiency with which an energy source is converted into electricity, as well as the power plant's online (non-intermittent) reliability. The size of the various sites is being determined by the amount of power required in each area. Sun and wind are the two renewable energy sources most endorsed in the debate. For example, a wind farm of 1,000 MW rated capacity takes 7-10 years to build, and its “median performance”—that is, actual electricity generated — is half or less than half of a 1,000 MW coal-fired plant takes 2-3 years to build. Photovoltaics for the same investment conditions on average generate much more energy than wind power, so the debate often points the

choice in this direction. Nonetheless, it is highlighted those renewable technologies take three or four times to produce the same energy previously produced through coal.

The zero-carbon or low carbon objective to reduce CO2 emissions does not currently find incentive policies for carbon reduction by non-European producers. It was also stated that a Carbon Border Adjustment system would boost European steelmakers' efforts to cut carbon emissions while simultaneously incentivizing non-European companies to do so. The proposed law on emissions has partly absorbed the recommendations of some critical stakeholders that will be affected by the new rules, and the logistics service representatives participated in the work providers, seaport and inland port authorities, shippers, combined transport operators, rail freight operators, port and terminal operators, marine equipment manufacturers, and shipyards. To date, particular attention has been paid to the production of low-emission steel and the parallel importation of only "green steel", however, leading to higher costs that affect the European market from 35% to 100% compared to the previous situation. In order to reduce emissions, the European Community is focused on recycling and the possible circular economy linked to batteries. On a global level, the economic push to develop green finance came precisely from the pandemic crisis. Investments in ESG Bond allowed for expansion of vaccination plans and more excellent prevention of industrial accidents. The major investments are destined for the production of steel, chemicals and cement which produce the highest emissions to date and are considered strategic sectors by Europe. Many European and extra European states have started issuing green bonds, identifying them as a possible short-term response to the crisis. However, Covid has changed the commitment of some dissident powers; China has committed to reducing carbon emissions to zero by 60. Some electricity producing companies have simultaneously launched initiatives aimed at respecting the Green Deals objectives, in particular, in Europe not having received EU grants, Enel has still started for 70% of the planned investments in renewable energy. Extra-EU the FTE Energy present in America has committed to be net-zero carbon by 2050 and the reduction of CO2 emissions 50 percent by 2030 and 80 percent by 2040.

Covid has led to a change in the work paradigm by accelerating smart working and forcing digital change. The challenge undertaken in the pandemic period concerns automation, digitization and the use of other technologies. Digital change has initiated a greater incidence in investments aimed at the digitization of cities (Jafari-Sadeghi et al., 2021; Garousi Mokhtarzadeh et al., 2020). At the

same time, there has been an increase in the number of freelancers who have tried to respond to a period of crisis in the labor market for those who did not yet have a job. A crisis has reduced the possibility of finding an occupation only in the areas adjacent to those of residence, thus reducing the possibilities. On the other hand, many companies have invested in employees, recognizing in training a more remarkable ability to foster loyalty, customer satisfaction and positive brand perception. Among the sectors particularly affected by the pandemic, the one relating to the crisis linked to the supply-chain process, mainly affected by the pandemic and influenced by future investment policies, emerges (Riahi Dorcheh et al., 2021).

The policy proposed to food producers has been to produce more with less. Less soil but also fewer nitrates and other supporting chemicals. The policy started affects the lower use of pesticides, antibiotics, and fertilizers. A production that continued during the pandemic crisis despite the difficulties in importing and exporting what was produced. Furthermore, a lower taxation policy can increase the sale of organic fruit and vegetables. Some significant factors to date are absent in the proposed European policies, such as high yield seeds, adding more work, or cushioning the impact of reduced production reducing waste in the food chain. The possibility of personalized training has allowed us to understand what works and what are the limits of smart working. The process initiated a change in the redefinition and redesign of the work. The environment and the well-being of workers were debated issues in the pandemic period. Despite the intention not to affect jobs, the European Commission released its "Farm to Fork and Biodiversity Strategies "in May 2020. In practice, a smaller quantity of food will be produced by seeking a better quality. The choice was adopted following an analysis that finds that one-fifth of the food produced is wasted while 36 million citizens cannot afford a quality meal every second day. At the same time, it provides for 30% of the agricultural land across Europe to be returned to nature. The agriculture output drops 12% overall, and worldwide production drops 1%. The United States Department of Agriculture (USDA) has opened the debate on the political choice made by the European Commission with the “Farm to Fork Biodiversity Strategies” which, according to estimates, could affect the actual possibility of access to food. Insecurity found equal to 185 million people would be thrown into food insecurity (lack of reliable services and/or enough food) over ten years. The current European export policy outside the EU intends to consider the world as the only region with considerable repercussions also economically.

6. Conclusion

The Green Deal policy influences the entire globe but has had a specific influence in the short term as the analysis carried out shows a relapse between theoretical objectives and priority themes also developed due to the pandemic crisis. While on the one hand, it has reduced attention to some priority sectors and some issues such as sustainable transport, textiles, general waste management, electronics, plastic management and the circular economy has, on the other hand, focused and given priority to some issues that affect the well-being of the community rather than the profit of corporations (Pettifor, 2020). The investment plan envisaged by the Next Generation Found EU can relaunch the objectives of the Green Deal, the analysis highlights the political priorities and the most debated sectors, and precisely because of COVID-19, they have been more developed than others. The analysis of clusters and relationships highlighted how the short period had disruptive effects. Compared to what was highlighted by the EGD (Brindelli & Chiampini, 2021), the debate and international application have mainly focused on the steel production sector, identifying the exploitation of hydrogen as an element in which to invest. Another element recalled concerning the provisions of the EGD concerns only the recycling and management of electric batteries in which Europe is investing (Zhong et al., 2020). The particularly relevant issue for the EGD concerns farm management, the "Farm to Fork" policy (European Commission, 2019) intervenes on the exploitation of inputs and the volume of food produced, but in fact, opens a rift between the intentions of the European Commission to waste less food with better territorial quality and fewer imports and the possible increase in the impoverishment of subjects who already had difficulty in accessing quality meals. The de facto policy also aims to increase local biological diversification, self-sufficiency and reducing deforestation, elements driven by the pandemic crisis, and the difficulty of the supply-chain sector (Sadraei et al., 2018). According to the analysis, the change in spaces and smart working driven by COVID-19 and the lockdown has increased the attention to decarbonization, and the change that cities must have, investments aimed at prioritizing lower energy consumption are already underway buildings. The theme confirms the attention already paid by GND 2.0 (Aronoff et al., 2019; Palea & Drogo, 2020). Change and energy consumption not only affect public regulation but also private regulation, confirming carbon prices policies (Mastini et al., 2021). The pandemic has sought resources through the London financial

market with green bonds to immediately deal with the pandemic crisis and still finds interest today on the part of the European market (Mastini, Kallis, and Hickel, 2021; Fatica & Panzica; 2020), however, opposed by other non-European productive powers. Investments aimed at exploiting natural resources such as natural gas and water for electricity production have been defined as priorities. However, a debate is open regarding adequate power and the best renewable source among those already widespread (wind and photovoltaic) with possible effects on spaces required according to the required volume required. Nuclear is not considered a clean resource to invest in Europe. The involvement and relaunch of work concerning the sectors on which the Green Deal policies will have the most significant impact have not been addressed and is the most critical in a period of recession and social difficulty caused by the pandemic; the issue significantly deviates from the objectives that the European Commission had set itself (Samper, Schockling, & Islar; 2021). In the short term, the Green Deal finds a push and a relaunch caused in part by the pandemic by the investments of the European Commission. However, it has been conditioned and opposed by the previous United States government and by China which is still trying to define the future policy between expansion and environmental effects detected following the lockdown. The recharge results have evidence and impact in several industrial sectors and on the community, effectively conditioning both the production processes, the materials and energy used, and the consumption and policies that impact the community and services of public interest. Future research could analyze the actual investments and projects carried out thanks to the Next Generation Found EU, and the incidence of the priorities pushed up to now by COVID-19 that influence on the one hand the well-being of citizens on the other the European production sector and worldwide export and import policies.

6.1 Limitations

As with any research, there are limitations. The analysis considers only issues developed by the media and which have been given complete transparency. Some information and decisions of the European Commission may not have been fully publicized. The small sample represents significant economic and political information but does not consider other socio-cultural information that could be collected through the aid of other information databases. Additionally,

many studies (qualitative and quantitative) could also be done to compare the situation of European Green Deal investment applications.

References

Birindelli, G., & Chiappini, H. (2021). Climate change policies: Good news or bad news for firms in the European Union?. Corporate Social Responsibility and Environmental Management, 28(2), 831-848.

Aronoff, K., Battistoni, A., Cohen, D. A., & Riofrancos, T. (2019). A planet to win: why we need a Green New Deal. Verso Books.

Brahmana, R. K., & Kontesa, M. (2021). Does clean technology weaken the environmental impact on the financial performance? Insight from global oil and gas companies. Business Strategy and the Environment.

Brescia, V. (2020). Bibliometrix analisi: volontariato e community-based. European Journal of Volunteering and Community-Based Projects, 1(1), 1-22. Retrieved from https://pkp.odvcasarcobaleno.it/index.php/ejvcbp/article/view/2

Campra, M., Esposito, P., & Lombardi, R. (2020). The engagement of stakeholders in nonfinancial reporting: New information-pressure, stimuli, inertia, under short-termism in the banking industry. Corporate Social Responsibility and Environmental Management, 27(3), 1436-1444.

Campra, M., Esposito P., & Brescia, V. (2020). State of the art of COVID-19 and business, management, and accounting sector. A bibliometrix analysis. International Journal of Business and Management, 16(1), 2021.

Campra, M., Riva, P., Oricchio, G., & Brescia, V. (2021). Bibliometrix analysis of medical tourism. Health Services Management Research, 09514848211011738.

Claeys, G., Tagliapietra, S., & Zachmann, G. (2019). How to make the European Green Deal work. Bruegel.

Euorpean Union (2020). Coronavirus, EU industry joins forces to help european citizens. doi:10.2775/087857 NUMBER: NA-AW-20-004-EN-N

European Commission. (2019). The European Green Deal: Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions (COM 2019 640 final). Brussels: European Commission.

Regulation (Eu) 2018/841 Of The European Parliament And Of The Council of 30 May 2018 on the inclusion of greenhouse gas emissions and removals from land use, land use change and forestry in the 2030 climate and energy framework, and amending Regulation (EU) No 525/2013 and Decision No 529/2013/EU.

Falk, M. T., & Hagsten, E. (2020). Time for carbon neutrality and other emission reduction measures at European airports. Business Strategy and the Environment, 29(3), 1448-1464.

Fatica, S., & Panzica, R. (2020). Green bonds as a tool against climate change?. Business Strategy and the Environment.

Garousi Mokhtarzadeh, N., Amoozad Mahdiraji, H., Jafari-Sadeghi, V., Soltani, A., & Abbasi Kamardi, A. (2020). A product-technology portfolio alignment approach for food industry:

A multi-criteria decision making with z-numbers, British Food Journal. 122(12), 3947-3967. https://doi.org/10.1108/BFJ-02-2020-0115

Halluite, J., Linton, J. D., Yeomans, J. S., & Yoogalingam, R. (2005). The challenge of hazardous waste management in a sustainable environment: insights from electronic recovery laws. Corporate Social Responsibility and Environmental Management, 12(1), 31-37.

Jafari-Sadeghi, V. (2021). Internationalisation, Risk-Taking, and Export Compliance: A Comparative Study Between Economically Advanced and Developing Country. International Journal of Entrepreneurship and Small Business, 43(3), 384–408. https://doi.org/10.1504/ijesb.2021.10039076

Jafari-Sadeghi, V., Garcia-Perez, A., Candelo, E., & Couturier, J. (2021) Exploring the impact of digital transformation on value creation through technology entrepreneurship: Role of technology readiness, exploration and exploitation. Journal of Business Research, 124(2021), 100-111. https://doi.org/10.1016/j.jbusres.2020.11.020

Jafari-Sadeghi, V., Dutta, D. K., Ferraris, A., & Del Giudice, M. (2020). Internationalisation business processes in an under-supported policy contexts: evidence from Italian SMEs. Business Process Management Journal, 26(5), 1055-1074 https://doi.org/10.1108/BPMJ-03-2019-0141

Leonard, M., Pisani-Ferry, J., Shapiro, J., Tagliapietra, S., & Wolff, G. (2021). The geopolitics of the European green deal. Bruegel Policy Contribution, (04), 2021.

Martin, N., & Rice, J. (2010). Analysing emission intensive firms as regulatory stakeholders: a role for adaptable business strategy. Business Strategy and the Environment, 19(1), 64-75.

Martin, M., & Islar, M. (2021). The 'end of the world'vs. the 'end of the month': understanding social resistance to sustainability transition agendas, a lesson from the Yellow Vests in France. Sustainability Science, 16(2), 601-614.

Massaro, M., Secinaro, S., Dal Mas, F., Brescia, V., & Calandra, D. (2021). Industry 4.0 and circular economy: An exploratory analysis of academic and practitioners' perspectives. Business Strategy and the Environment, 30(2), 1213-1231.

Mastini, R., Kallis, G., & Hickel, J. (2021). A Green New Deal without growth?. Ecological Economics, 179, 106832.

Montanarella, L., & Panagos, P. (2021). The relevance of sustainable soil management within the European Green Deal. Land Use Policy, 100, 104950.

Nunez-Mir, G. C., Iannone III, B. V., Pijanowski, B. C., Kong, N., & Fei, S. (2016). Automated content analysis: addressing the big literature challenge in ecology and evolution. Methods in Ecology and Evolution, 7(11), 1262-1272.

Ossewaarde, M., & Ossewaarde-Lowtoo, R. (2020). The EU's Green Deal: A Third Alternative to Green Growth and Degrowth?. Sustainability, 12(23), 9825.

Palea, V., & Drogo, F. (2020). Carbon emissions and the cost of debt in the eurozone: The role of public policies, climate-related disclosure and corporate governance. Business Strategy and the Environment, 29(8), 2953-2972.

Penn-Edwards, S. (2010). Computer Aided Phenomenography: The Role of Leximancer Computer Software in Phenomenographic Investigation. Qualitative Report, 15(2), 252-267.

Pettifor, H., Wilson, C., & Chryssochoidis, G. (2015). The appeal of the green deal: Empirical evidence for the influence of energy efficiency policy on renovating homeowners. Energy Policy, 79, 161-176.

Pettifor, A. (2020). The case for the green new deal. Verso.

Rosenow, J., & Eyre, N. (2013). The green deal and the energy company obligation. Proceedings of the Institution of Civil Engineers-Energy, 166(3), 127-136.

Riahi Dorcheh, F., Razavi Hajiagha, S. H., Rahbari, M., Jafari-Sadeghi, V. & Amoozad Mahdiraji, H. (2021) Identification, analysis and improvement of red meat supply chain strategies considering the impact of COVID-19 pandemic: A hybrid SWOT-QSPM approach in an emerging economy. British Food Journal, https://doi.org/10.1108/BFJ-09-2020-0865.

Sadraei, R., Jafari Sadeghi, V., & Sadraei, M. (2018). Biotechnology revolution from academic entrepreneurship to industrial: chemo-entrepreneurship. Biometrics & Biostatistics International Journal, 7(6), 546-550. https://doi.org/10.15406/bbij.2018.07.00257

Samper, J. A., Schockling, A., & Islar, M. (2021). Climate politics in green deals: Exposing the political frontiers of the European Green Deal. Politics and Governance, 9(2), 8-16.

Secinaro, S., Brescia, V., Calandra, D., & Biancone, P. (2020). Employing bibliometric analysis to identify suitable business models for electric cars. Journal of Cleaner Production, 121503.

Secinaro, S., Brescia, V., Calandra, D., & Saiti, B. (2020a). Impact of climate change mitigation policies on corporate financial performance: Evidence-based on European publicly listed firms. Corporate Social Responsibility and Environmental Management, 27(6), 2491-2501.

Secinaro, S., Brescia, V., Calandra, D., & Biancone, P. (2021). Towards a hybrid model for the management of smart city initiatives. Cities, 116, 103278.

Secinaro, S., Dal Mas, F., Brescia, V., & Calandra, D. (2021a). Blockchain in the accounting, auditing and accountability fields: a bibliometric and coding analysis. Accounting, Auditing & Accountability Journal.

Smith, A. E., & Humphreys, M. S. (2006). Evaluation of unsupervised semantic mapping of natural language with Leximancer concept mapping. Behavior research methods, 38(2), 262-279.

Stewart, H., & Gapp, R. (2014). Achieving effective sustainable management: A small-medium enterprise case study. Corporate Social Responsibility and Environmental Management, 21(1), 52-64.

Sukumar, A., Jafari-Sadeghi, V., Garcia-Perez, A., & Dutta, D. K. (2020). The potential link between corporate innovations and corporate competitiveness: Evidence from IT firms in the UK. Journal of Knowledge Management, 24(5), 965-983. https://doi.org/10.1108/JKM-10-2019-0590

Von der Leyen, U. (2019). A Union that strives for more. My agenda for Europe. Political guidelines for the next European Commission, 2024, 2019.

Whiteman, G., de Vos, D. R., Chapin III, F. S., Yli-Pelkonen, V., Niemelä, J., & Forbes, B. C. (2011). Business strategies and the transition to low-carbon cities. Business Strategy and the Environment, 20(4), 251-265.

Ziabina, Y., & Pimonenko, T. (2020). The Green Deal Policy for Renewable Energy: A Bibliometric Analysis. Virtual Economics, 3(4), 147-168.

Zhong, X., Liu, W., Han, J., Jiao, F., Qin, W., & Liu, T. (2020). Pretreatment for the recovery of spent lithium ion batteries: theoretical and practical aspects. Journal of Cleaner Production, 263, 121439.