

## **Green economy and corporate fraud**

### **Zelena ekonomija i korporativne prevare**

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Received / Rad primljen: 20.07.2022, Accepted / Rad prihvaćen: 25.08.2022.

**Abstract:** The aim of the paper is to show the correlations between the green economy and corporate fraud in the business model of modern economy. In the first part of the paper, the basic principles of the green economy are presented, as well as criticisms and different views of the way in which it is possible to encourage sustainable development. Basic principles and examples of greenwashing are explained. The risks that appear depending on the measures taken to encourage changes that should lead to mitigating the negative effects of modern climate change are pointed out. The fact that there are many opportunities for committing fraud in the domain of sustainable economic growth was highlighted, with proposals for their prevention and mitigation presented. A comparison of global challenges and solutions as well as those immanent to the local economic environment is presented.

**Keywords:** green economy, fraud, greenwashing.

**Sažetak:** Cilj rada je da prikaže korelacije između zelene ekonomije i korporativnih prevara u poslovnom modelu savremene privrede. U prvom delu rada izneti su osnovni principi zelene ekonomije, kao i kritike i različita viđenja načina na koji je moguće podsticati održivi razvoj. Objasnjeni su osnovni principi i primeri zelenih manipulacija. Ukazano je na rizike koji se javljaju u zavisnosti od preduzetih mera za podsticanje promena koje treba da dovedu do ublažavanja negativnih efekata savremenih klimatskih promena. Istaknuta je činjenica da postoji mnogo mogućnosti za vršenje prevara u domenu održivog ekonomskog rasta, i izneti predlozi za njihovo sprečavanje i ublažavanje. Dato je poređenje globalnih izazova i rešenja kao i onih imanentnih lokalnom ekonomskom okruženju.

**Ključne reči:** zelena ekonomija, prevara, zelena manipulacija.

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#### **INTRODUCTION**

Author Marc Morano, with his book "Why the Green Deal is even worse than you think", caused a series of conflicting comments and opposite reactions in the professional public, ranging from total rejection of his theses to absolute agreement. The author expresses a categorical position that the Green Deal has nothing to do with science and saving the planet, but rather wants to exert a complete influence (most

likely with the intention of control) on every aspect of a individual's life: what kind of light bulbs and devices we use in the house, what is the way of heating and cooling homes, the type of car we drive, the food we eat, the clothes we wear, the way we use the land, the size of the house, the prices we pay and so on. In a word, Marc Morano lets us know that the Green Deal comprehensively wants to make an impact on our freedom of choice as individuals.

The Green Deal represents the culmination of decades of environmental activism that demands social change under the umbrella of solutions to environmental problems. The most common topics of environmental activists are: overpopulation, deforestation, damage to the ozone layer, depletion of natural resources and so on; all of which together lead to global warming and climate change. There is a common note, immanent to all of solutions that have been offered to solve the endangered planet, and it is reflected in the most extensive central planning, contracts that limit the sovereignty in decision-making of entities at different levels of micro and macroeconomics, up to a different redistribution of wealth in the world. The solution of the highlighted challenges is offered in increased state control and centralization of planning. These two ideas were proclaimed earlier in history, especially during more significant influence of politics (especially left oriented) in the economy.

Vehicles using internal combustion engines and their carbon dioxide emissions are listed as one of the main polluters and “enemies” of the planet. However, one step further is that even owning a vehicle would become less acceptable. The basic idea is to replace vehicles powered by internal combustion engines with electric vehicles that would be used on the principle of “timesharing”.

The question which arises is whether electric vehicles are really ecological vehicles. In the United States, the transportation sector has replaced power plants as the number one source of carbon dioxide emissions, with higher emissions coming from passenger cars and trucks. Internal combustion engines are the target for reduction. On the other hand, electric cars and the batteries they depend on are initiating much more significant debates related to environmental issues, and especially issues of social justice.

The other side of the topic related to electric cars is related to the components from which they are constructed. The raw materials for their production come from areas that are mostly unaware of the profitability of the auto industry, nor do they participate in it. One of the 2019 Sunday Times headlines is “Miners in Congo die to feed world's hunger for electric cars”.

## 1. MATERIAL AND METHODS

Green economy as a practical need and a scientific discipline has been developing throughout the history, following the demands of the economy, the public, the fiscal authorities and primarily those who manage economic entities and those who invest capital. Systems for monitoring the success

and comparison of markets in international frameworks are becoming more and more sophisticated and useful in this domain.

The aim of this paper is to indicate the main ideas of the green economy, its reflection on economic activity, as well as the reactions of the economy to the “green” movements and their ideas. Some of the effects of these ideas are short-term, while some are permanent. Different economic activities, as well as individual entities in the same branch of activity, reacted differently to the main postulates of the green economy and to the changes it brings. Also, “pro et contra” arguments are provided, as well as new views on this topic in new circumstances.

So far, there is a very small number of published domestic and foreign papers about this topic. The main source of data presented in this paper is research conducted by international organizations and foreign authors. Also, research was conducted in the local economic environment using publicly available data primarily from financial reports available via Business Register Agency.

This paper presents a brief review on the impact of the green economy on economic activity in general as well as on its individual segments, as well as the response of business entities to new circumstances. As one of the phenomena that is also being described are the corporate frauds that occur and the risks that lead to them, especially based on supporting activities that should lead to the reduction of pollution and the emission of harmful gases. The paper presents the postulates on which the green economy is based and their review. The social significance of this work is pointing out that it is not possible to easily establish parallels with earlier events and ideas, as well as an attempt to point out all the challenges of modern business, including the new requirements of environmental protection.

## 2. RESULTS AND DISCUSSION

The 2019 investigative journalism results of Christina Lamb show the following fact: “Last year, about 70 percent of the world's cobalt supply came from the Democratic Republic of the Congo, one of the poorest, most violent, and most corrupted places on Earth”.

A 2020 United Nations report warned of the side effects of electric car production “As demand for rechargeable batteries is projected to grow rapidly as electric vehicles become more integrated into global transportation, the volume of raw materials used in their production is also expected to grow rapidly”, the UN trade department, UNCTAD, explained in its report.

One of the main questions that can be asked considering the activities of governments and multinational companies is whether the main driver of new ideas is new profit or real concern for the planet? On which, if not economic, postulates will companies that will produce environmentally friendly goods and provide only environmentally friendly services function?

Previous economic knowledge is based on the fact that until now, money, that is, profit, was the main flywheel that drove empires and their economic power. It was also based on science, i.e., scientific discoveries necessary for new products, and was financed from a profitable activity.

In the history of the modern economy is crystallized one basic principle, the most important for progress, and that is growth.

The scientific revolution brought the idea of permanent progress. The idea of progress is based on the attitude that the situation will improve in the future if we admit lack of knowledge and invest the funds we currently have in new research, that is, technological inventions and organizational development will increase the total volume of production and material wealth of people.

### *2.1. Imposing the urgency = trigger for fraud and eco-manipulation*

Monitoring the melting of glaciers, rising sea levels, warming of the planet and overall changes that are not slowing down, impose the urgency of actions to protect the planet from climate change. One of the measures that has been assessed as urgent and can be implemented really quickly through incentives is decarbonization, i.e. reducing of carbon dioxide emissions to zero or as low as possible. Climate change mitigation projects attract billions of dollars. While funding such actions may have been desirable, the growing risk of fraud for businesses and governments generating a rapid tempo of change is not.

Investor sensitivity, changing consumer demand for different ("green") goods and services, and government actions increase the pressure to adapt to sustainable business practices, but the costs of such adaptation create an opportunity for business entities to commit fraud to misuse sustainability efforts on the one hand, and sensitive topic and urgency on the other.

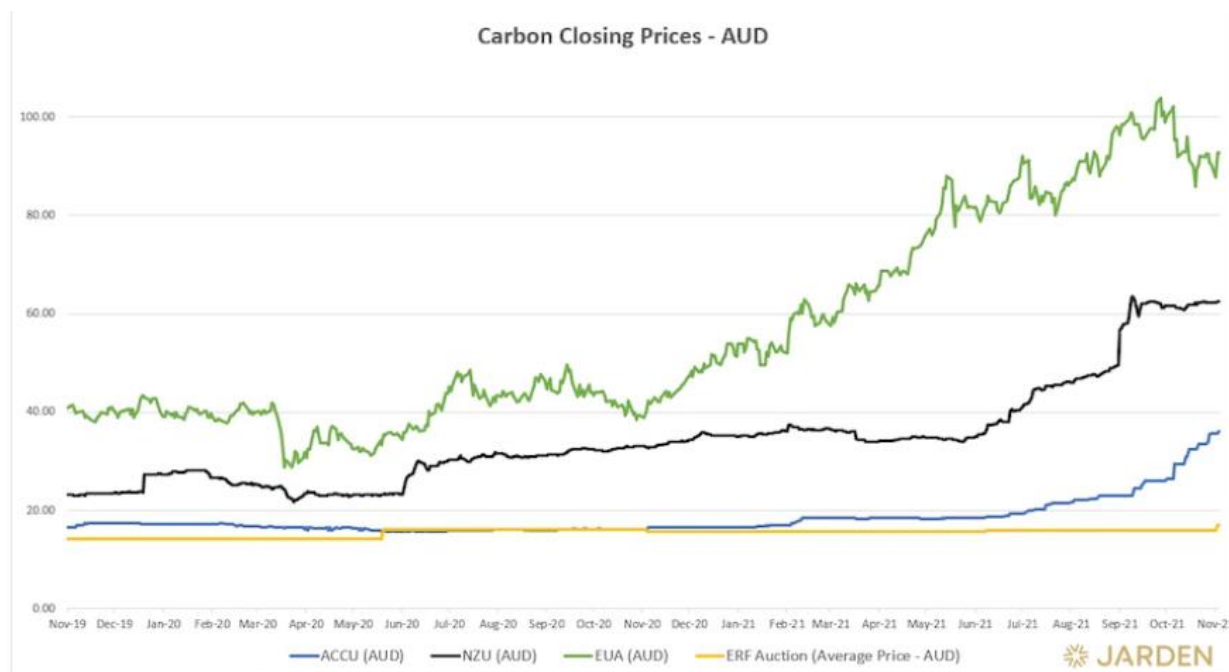
One of these risks is the so-called "greenwashing", i.e. eco-manipulation where companies overestimate their climate credentials. Eco-manipulation is a relatively new word in our practice. It originated from the English phrase "greenwashing", which entered the official lexicon of the English language in

1999 in the tenth edition of the Oxford English Dictionary. The essence of eco-manipulation is the misuse of green marketing. Namely, the marketing and public relations services of companies or government bodies inform the public in an inaccurate way in order to create an image of their own organization as an entity that behaves responsibly towards the environment and the protection of the natural environment. The goal behind eco-manipulation can be to increase profits, gain political support or manipulate public opinion in order to obtain support that would be absent if there is not such information presented, that is, misinformation. The above is made possible by relatively weak regulation and mandatory reporting. In August 2021, the oil and gas giant became the first company in Australia to face action against it over allegations of eco-manipulation. The procedure ended without a penalty for the company.

Other risks that can be a potential trigger for fraud in the green economy include cybercrime related to fraudulent activities and bribery and corruption in markets where multilateral organizations allocate funds to support climate actions, especially in developing countries. The appearance of these risks is not surprising, because paradigm changes by the nature of their activity create opportunities for fraud, and prices are a significant trigger. The movement of the price of carbon is shown in the figure 1.

The question arises whether fraud in the green economy can be avoided and what would be the instruments for prevention. As businesses entities shape their response to investors, consumers and government for sustainability, we need to understand that the speed of fraud prevention response will affect the likelihood of fraud and that strong anti-fraud measures can be put in place.

Measures such as reviews that provide assurance to assess the credibility of sustainability credentials and disclosures regarding sustainability projects, acquisitions and business partnerships can make a significant contribution to the battle for credibility. Fraud is usually seen as a financial or operational risk. Probably in many contexts that is true. But in this urgent moment for environmental activism, climate fraud will have implications beyond the financial and reputational - it will have environmental consequences that may be too late. If, under the imperative of urgency, significant funds are spent in an unintended way, trust in the sincerity of the intentions to protect the environment will be broken, negative ecological changes will not be stopped and we may witness negative predictions of climate change despite the spent billions.



Picture 1: Carbon prices in different world markets; Source: ACCUs.com. aw; CommTrade.co.nz

### 2.1. The global threat of green fraud

An immediate step towards climate protection is to reduce carbon emissions. Companies and governments are increasingly paying attention to reducing its emissions. Today, more than 130 countries are on track to target net zero emissions by mid of the century. Fulfilling this condition presupposes a significant reorientation and decarbonization of entire economies. Every aspect that touches the way people work and live - from electricity and transportation to housing and agriculture - must be completely reconstructed and financed. Such a project will be extremely expensive and will require large investments from both the public and private sectors.

Available estimates are that the cost of achieving zero emissions by 2050 is between USD 1 trillion and USD 2 trillion per year. When that much money is available, we can be sure that there will be those actors who are ready to acquire at least part of the funds illegally. The risk of "green fraud" is not only that it could develop on an industrial scale and waste billions of taxpayers' money, but that it threatens to undermine the very credibility of the decarbonization initiative.

Research on the potential increase in green fraud can also be supported by considering recent examples of fraud targeting incentives of various countries during the pandemic. The pandemic has changed the paradigm of usual international affairs and financial relations as well as the movement of

capital, which can be expected from the upcoming green changes. A comparison with this example from the recent past is possible in terms of neutralizing the consequences of the pandemic. Responses to the pandemic had to be urgent and required large resources, which is comparable to the circumstances presented in relation to climate change. So, the experiences that have been formed are valuable. According to the UK's National Audit Office, the fraud existed when helping businesses affected by COVID-19. According to the data of this institution, the total cost of frauds affected the British taxpayers for 4.9 billion pounds, which represents approximately 11% of the total investment in measures to neutralize the impact of the pandemic. In the United States, the relevant body estimated that by December 2021, fraudsters had misused nearly \$100 billion of the \$3.5 trillion distributed from three federal programs to support businesses affected with the effects of COVID-19.

In order to create a comprehensive picture of the potential of fraudulent actions, we can also refer to estimates presented by FTI Consulting, stating that at least 5% of £1 trillion could be subject to fraudulent actions. It would cost taxpayers around £3.5 bn a year. In order to convey the value of the amount and the risk, pictorially expressed this fund would be enough to pay the salaries of 31,000 nurses and 14,000 policemen in Great Britain in one year or to plant 200 million trees.

As green initiatives and investment programs develop, we can expect the standard array of fraud in green schemes to develop in parallel.

All the mentioned researches aim to support the attitude that in the field of green economy is needed to act strategically and thoughtfully in order to protect green investments from the risks and costs of fraud.

The first step in this process would be to identify potential fraud risks for each fund, grant, scheme and investment. After that, past experience imposes the need to design appropriate policies, procedures and controls, including internal controls in purchasing policies. These processes must be aligned with identified fraud and operational risks, as well as government and private sector best practices.

### 2.3. Local aspect

Proposals of measures to protect the environment in Serbia very often refer to the reduction of exhaust gases in cities that originate from vehicles, banning the movement of cars in certain city zones or periods of the day, as well as subventions for the purchase of electric vehicles.

In this segment of the paper, the results of these measures will be presented in terms of the success of subsidies, that is, the number of electric vehicles sold, as well as the profitability of the sector of the economy that operates in the import and distribution of vehicles. In the last period, due to disrupted supply chains, the mentioned sector implemented reductions in the number of employees and received subventions both due to the pandemic and due to the promotion of sales of electric vehicles, which are considered to be less polluting. The goal of analyzing this data is to compare the performance indicators of this segment of the economy last year and this year, bearing in mind that significant funds are invested in encouraging this activity.

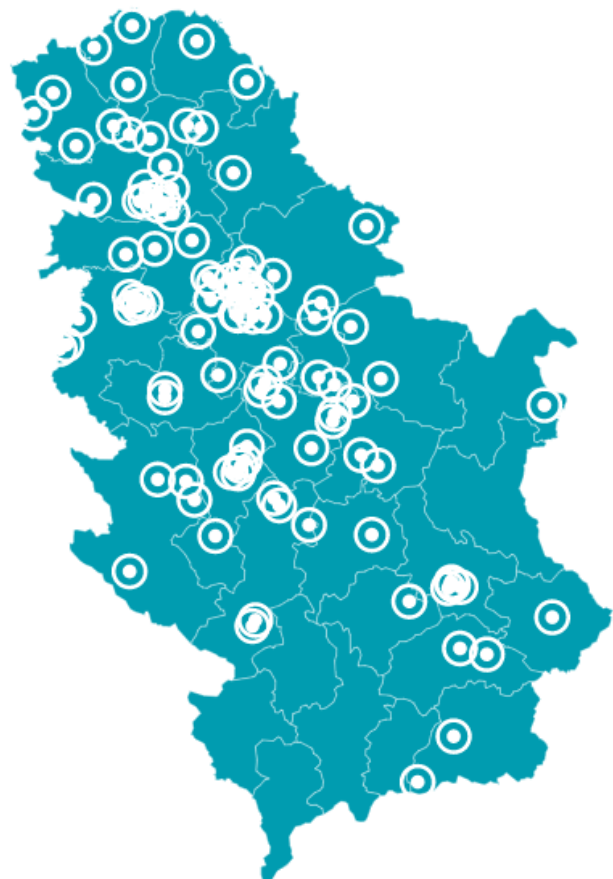
Available information from the Serbian Association of Vehicle and Spare Parts Importers shows that 30,416 new cars were sold on our market in the previous year (2021), which is 16 percent more than in 2020. The effect of subsidizing electric vehicles or the awareness of our citizens about green mobility is such that in total around 50 electric vehicles were registered last year and their owners are predominantly legal entities.

Researches show that the obstacle in increasing the number of such vehicles is the lack of infrastructure for their use, i.e. the insufficient number of chargers for these vehicles. The information available from "Roads of Serbia" is that by February of this year, eight chargers for electric cars were installed at strategically key points, that is, on the main road routes in Serbia.

Having in mind the above mentioned, we will present data on the financial indicators of companies that trade in cars and light motor vehicles in Serbia (NACE code 4511). The analysis of these data should show whether the awareness of individuals and companies is such that the sale of cars with internal combustion engines instead of battery-powered ones is decreasing and that this is a branch of the economy in extinction, or the data is just the opposite and shows that pollutants, on whose neutralization is spent significant taxpayer fund, will continue to be present and grow with the increasing interest of investors in this activity that cannot be called green.

According to the latest data available in the register of the Business Register Agency, there are 3,533 business entities in Serbia that are registered with the mentioned activity code.

Their geographical spread is not different from other trading companies and they are distributed in the expected way that follows the level of development and purchasing power of each area:



Picture 2: Geographical distribution of business entities registered under activity code 4511  
Source: Checkpoint commercial database.

Due to the volume of data for analysis, it was carried out on 100 economic entities that are the largest in terms of turnover in 2021, with the key indicators for the 10 largest being highlighted. Although the analysis is based on statutory financial reports, which are not secret information, but are publicly available, the names of the companies or brands whose dealers they are not highlighted here, because that is not the goal of the research, but rather the overall picture and presentation of trends in the industry, which is the most common investigated when talking about measures to encourage the green economy. In addition, several years ago, car companies were examples of corporate frauds carried out by manipulating the car's software to recognize the test environment and in such circumstances show measurements with no carbon dioxide emissions, while later experts determined that the emissions were 40 times higher than declared. This famous affair showed that the demand for cars is not as elastic as it was commonly believed.

The first 100 analyzed entities had the following key financial indicators for 2021 and 2020:

*Table 1: Financial indicators of the top 100 companies by turnover in the vehicle sales activity.*

Category	2021	2020	growth
Turnover (EUR)	1.265.875.013	1.023.686.697	24%
Net profit (EUR)	48.103.711	33.154.427	45%
Number of employees	2.328	2.288	2%

Source: Business Register Agency

*Table 2: Financial indicators of the top 10 companies by turnover in the vehicle sales activity.*

Category	2021	2020	growth
Turnover (EUR)	649.572.566	502.338.201	29%
Net profit (EUR)	31.052.451	19.325.051	61%
Number of employees	535	509	5%

Source: Business Register Agency

Based on presented financial indicators for the largest 100 companies, we can determine that the turnover increased by 24%, while the profitability of this growth is disproportionately higher, i.e. that the net profit is higher by 45%. This growth was achieved with an increase in the number of employees of only 2%. Bearing in mind the above data on the negligible share of electric vehicle sales, it is clear

that profitability in the vehicle sales industry dominated by internal combustion engines is on a significant increase and that profitability is increasing, which implies that all increased costs are caused by external factors such as a pandemic or similarly, to an even greater extent, transferred to customers and this branch of industry had only benefits.

The above results raise the question to whom are subventions for purchase of such a small number of electric vehicles intended for, i.e. whether local taxpayers' money has saved the environment or increased returns on the capital of investors who invest in the production and sale of conventional vehicles.

If we look at the data for the top 10 entities from this branch, the expected results are even more extreme, i.e. with an increase in turnover of 29%, the increase in profit amounts to 61%.

## CONCLUSION

This paper highlights the fact that there are many incentives, opportunities and rationalizations for committing fraud in the domain of sustainable economic growth that does not endanger the environment.

In circumstances where there is an investment of significant funds, there is increasing pressure and higher expectations regarding sustainability performance, and financial interests are also growing. The overall picture will increasingly encourage the vulnerability of companies, and the management to fraud.

Many companies are taking steps to improve their sustainability efforts and performance. Also, it is indicative that sustainability will have financial consequences for companies and therefore for investors.

Efforts to preserve the environment should not be undermined by a lack of trust, skepticism or the perception of eco-manipulation.

This paper includes some information that presents topics for consideration by both investors and companies. Also, another goal is to shed light on the risks and instruments to prevent fraud with the intention of getting the appropriate level of attention for this topic from all those who have an interest in it.

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