

Carbon Tax as One of the Financial Instruments to Stimulate the Green Economy

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Abstract: The green economy is an economic model that is characterized by a low level of carbon use, efficient use of available resources, aimed at ensuring social well-being. In a green economy, employment and income growth are driven by public and private investments in economic activities, infrastructure and assets that reduce carbon emissions and pollution, and increase energy and resource efficiency. In order to stimulate this area, it is necessary to constantly look for mechanisms and tools, one of which is the carbon tax.

1 INTRODUCTION

To date, the situation with environmental pollution has worsened so much that the search for a solution to this problem has become a priority for all actors at the global level. If earlier nature was protected by individual representatives of enthusiasts and environmentalists, now every person has felt for himself what a careless attitude to nature has led to. We live in a stone jungle and observe how the planet is getting dirtier every day. On social networks, we often come across articles about animals that are recognized as endangered species, how many marine creatures have become extinct due to polluted waters, and these lists are getting longer every day.

The Industrial Revolution, undoubtedly, appeared as a new stage in the development of the world, but it also gave rise to a number of problems that we, the people, have to deal with. The destruction of the ozone layer, tons of oil waste thrown into the seas and oceans, tons of plastic that does not decompose by itself and causes the formation of garbage "spots" in the oceans, all this is ours today.

As the world transforms with the development of technology, climate, politics and economics, solutions are emerging that positively balance environmental and social goals for the benefit of nature, people and business in particular. The leader is the "Green Economy", an economic model headed by the well-being of people and environmental sustainability.

2 MATERIAL AND METHODS

The main methods used in the course of the study are the analysis of the results obtained during the study of articles, journals and books, the derivation of general patterns, the generalization of the information obtained during the study of this topic.

3 RESULT AND DISCUSSION

The essence and importance of the "Green" economy lies in the fact that it contributes to a more sustainable and low-carbon economy. With the widespread use of the concept of "Green" economy, the term "green" technologies also appeared.

Green technologies refer to the type of technologies that are considered environmentally friendly based on their production process or supply chain. The term is also applicable to the production of clean energy, the use of alternative fuels and technologies that are less harmful to the environment. Although the green technology market is relatively young, it has attracted considerable investor interest due to the growing awareness of the effects of climate change and the depletion of natural resources. (Kamilova).

Green technologies are a broad category covering several forms of environmental restoration. While climate change and carbon emissions are now considered among the most pressing global issues,

there is also a lot of effort being made to address local environmental hazards. Some seek to protect certain ecosystems or endangered species. Others seek to conserve scarce natural resources by finding more sustainable alternatives.

To provide a viable alternative to fossil fuels, many businesses are looking to develop alternative energy sources that do not produce atmospheric carbon. Solar and wind energy are currently among the most inexpensive sources of energy, and solar panels are available to residents in the US on a consumer scale (Carbon starvation: how Russia can adapt to the EU import tax.<https://trends.rbc.ru/>).

According to the Environmental Protection Agency, almost a third of greenhouse gas emissions in the United States are from transportation activities. Many manufacturers are exploring ways to reduce automotive emissions either by developing more fuel-efficient engines or by switching to electricity.

However, electric vehicles require many innovations in other areas, such as high-capacity batteries and charging infrastructure. In addition, the benefits of electric vehicles are limited by the fact that many power systems still use fossil fuels.

Agriculture and animal husbandry have a significant impact on the environment, from the high cost of using land and water to the environmental consequences of the use of pesticides, fertilizers and animal waste. As a result, there are many opportunities for "green" technologies in the field of agriculture. For example, organic farming methods can reduce damage from soil depletion, innovations in livestock feeding can reduce methane emissions, and meat substitutes can reduce livestock consumption (Global water pollution: causes, consequences and ways to solve the problem.<https://militaryarms.ru/>).

Recycling is aimed at preserving scarce resources through the reuse of materials or the search for sustainable substitutes. While plastic, glass, paper and metal waste are the most common forms of recycling, more complex operations can be used to extract expensive raw materials from electronic waste or automotive parts.

"Green" technologies require a significant amount of infused funds, or rather financing in various forms, both at the public and private, and at the international level (figure 1).

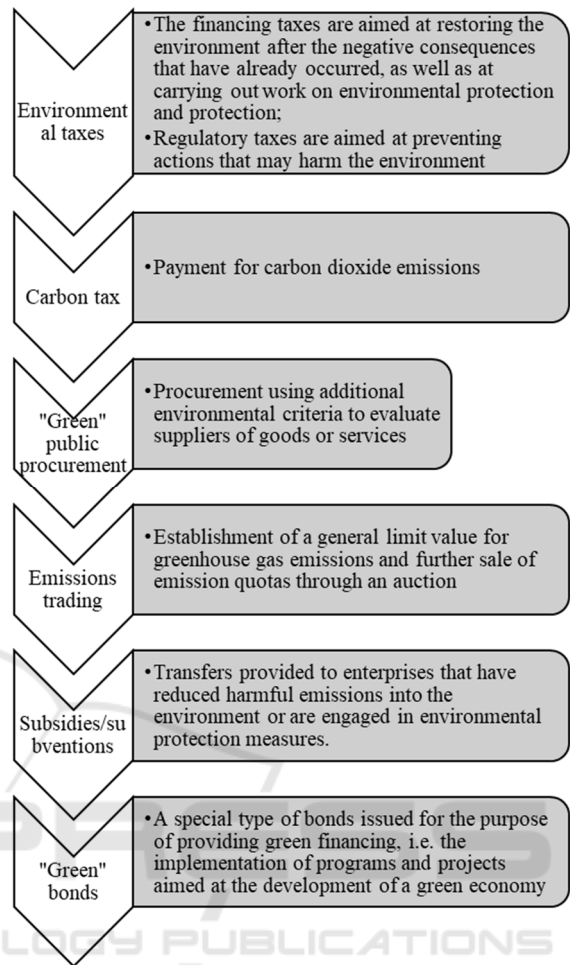


Figure 1: Financial instruments for stimulating "green" industries.

Of all the financial instruments presented above to stimulate the economy, special attention should be paid to the carbon tax.

A carbon tax is a fee for burning carbon—containing fuels (coal, oil, gas). Moreover, the carbon tax is the main policy of reducing and, ultimately, ending the use of fossil fuels, the burning of which destabilizes and destroys our climate (Investlab, <https://invlab.ru/texnologii/zelyonye-tehnologii/>).

The carbon tax is the most effective way to encourage consumers and users of carbon fuels to pay for the climate damage caused by the emission of carbon dioxide and vapors into the atmosphere. If the tax rates are high, it will force everyone to switch to clean energy, since the use of carbon will simply become unprofitable (Sleptsova, 2021).

The introduction of a carbon tax gives consumers and producers a monetary incentive to reduce carbon dioxide emissions (figure 2).

Positive:	Negative:
<ul style="list-style-type: none"> • Added value reduces emissions, motivating consumers to seek cleaner energy; • Accelerates economic growth due to a significant increase in government revenues; • Funds of agencies managing the effects of climate change are increasing. 	<ul style="list-style-type: none"> • The carbon tax is regressive; • Its sudden increase shocks the economy; • Punishes those who cannot switch to alternative forms of energy. Often these are city-forming enterprises.

Figure 2: Pros and cons of introducing a carbon tax.

Taxes allow industries to find the most cost-effective ways to reduce carbon emissions. This is a better alternative to a market economy than government regulation. The carbon tax also contributes to economic growth. For example, the carbon tax in Sweden has reduced emissions by 26% over the past 27 years. During the same period, its economy grew by 78% (Kanunnikova, 2021).

However, the disadvantages of introducing a carbon tax should also be disclosed. As noted above, the carbon tax is regressive, and when gasoline and gas prices rise, these high percentages will become a heavy burden for the population who will not be able to switch to "Green Technologies", that is, everyday things will become inaccessible to them. Based on this, it is necessary to introduce a carbon tax gradually so that people get used to the fact that prices will only rise and look for alternative options.

The European Union also announced the "European Green Course", which aims to create a climate-neutral EU economy by 2050. As one of the measures, it is planned to introduce a carbon tax on imports to EU countries. If everything is implemented according to the plan, importers will have to buy carbon certificates corresponding to the carbon price that would be paid in the EU if the goods were produced locally. The EU has proposed to introduce a tax on imported carbon-intensive products, which will determine the role of trade in the fight against climate change (The EU introduces a carbon tax. What is its essence and how it works: Ecology News. <https://finance.rambler.ru/>). These measures are

causing controversy among EU trading partners, some of whom consider it "green protectionism". At best, the proposed carbon tax should promote a common understanding of carbon-based trade policies, maximizing both environmental and economic benefits (Kamilova).

Reducing carbon emissions into the atmosphere is a global trend, not just a whim of the European Union. For example, China, Japan and South Korea declare carbon neutrality as a national goal (Burko, 2013). As emission control practices are implemented in different countries, the establishment of cross-border regulations will become more likely.

In order for exporting countries to survive in the "green" market, it will be necessary to create their own state system of accounting and evaluation of carbon gas, develop tariffs, as well as a system of incentives for enterprises that have abandoned the use of carbon gas, thereby minimizing possible climate damage (Kanunnikova, 2021). Only in this case, when the state responds promptly to rapidly growing changes in all areas of the world market, it will be possible to maintain the competitiveness of the country, as well as ensure sustainable development.

4 CONCLUSIONS

The essence and importance of the "Green" economy lies in the fact that it contributes to a more sustainable and low-carbon economy. In order to stimulate this area, it is necessary to constantly look for mechanisms and tools, one of which is the carbon tax.

The introduction of a carbon tax has both advantages and disadvantages.

The Russian economy is not ready for such structural shifts as the introduction of a carbon tax, as it will have to revise all directions, starting with the regulatory and legislative framework.

However, it cannot fail to react to the changes taking place around the world, since the cross-border tax introduced in the EU countries will primarily negatively affect the Russian economy and its competitiveness.

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