

POLICY PAPER

CARBON TAXATION POLICIES

IMPORTANCE, CHALLENGES AND
OPPORTUNITIES FOR KOSOVO





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Institute for Development Policy (INDEP), in the framework of the project **“Carbon Tax - Advocacy for the implementation of the internal carbon tax system in Kosovo policies”** has drafted the paper **“Carbon Taxation Policies - Importance, Challenges and Opportunities for Kosovo”**. This paper has been drafted within the framework of the Sustainable Development program of INDEP. The project is supported by the Kosovo Foundation for Open Society, therefore the views expressed in this publication are those of INDEP and in no way can be considered as the position of the Kosovo Foundation for Open Society.

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INTRODUCTION

After overcoming a global and threatening challenge like the COVID-19 pandemic, we will now face the challenge of the century, combating climate change. Scientists attribute the global warming trend observed since the mid-20th century to the human expansion of the “greenhouse effect” that results when the atmosphere traps heat radiating from Earth toward space. Humans have increased atmospheric CO₂ concentration by 48% since the Industrial Revolution began. Although greenhouse gas emissions have decreased significantly during the quarantine period due to limited movement, with the COVID restrictions being lifted and the return to normal activity these emissions have increased and are expected to exceed previous values. On that note significant policy changes are required in the global level to help mitigate these effects by reducing carbon emissions.

As Kosovo aims to integrate into the European Union, the focus of the European Union has shifted to adopting policies and setting international goals to tackle climate change. Policies and agreements have been drafted between European countries and third countries in attempt to mitigate the effects of climate change. Kosovo as a developing country has not prioritized this issue, as economic development and social welfare have always been the main focus of governments. But sustainability and economic development can coexist, with appropriate policies.

Kosovo has signed the Declaration of Sofia Summit and has received the commitment for full decarbonization by the year 2050. Aiming for full decarbonization by 2050 is an ambitious but necessary task, and can only be achieved by setting practical policies to reduce emissions. Carbon pricing is a policy tool that puts a price directly on the emission of greenhouse gases, thereby motivating companies to invest in cleaner technology or switch to more efficient practices, ensuring a decrease of CO₂. When GHG emissions are more expensive, economic actors are incentivized to account for the costs of their emissions when making commercial decisions. Over time, these costs are likely to mean that lower-emissions producers gain market share over their higher-emissions competitors. At the same time, consumers are likely to shift toward lower-emissions products due to their relative cost advantage, while consumption of higher emissions products is likely to be reduced or avoided. Putting a price on carbon has been adopted by many countries as the most efficient way to reduce GHG emissions.

As of April 2021, 45 national and 34 subnational jurisdictions are putting a price on carbon with more planning to implement carbon pricing in the future. The number of countries that will implement Carbon Pricing in the coming years will only increase,

¹United States Environmental Protection Agency, Climate Change, Climate Change Impacts, Impacts by Sector, accessible at shorturl.at/dlrTA, (accessed in February, 2022)

²NASA: Climate Change and Global Warming, Facts, Causes, accessible at shorturl.at/hGJTY, (accessed in February, 2022)

³The World Bank, What we Do, Data, Carbon Pricing Dashboard, accessible at shorturl.at/bpqPW (accessed in February, 2022) (accessed in February, 2022)

in order to achieve decarbonization of the energy, transport, and industry sectors. This transition will be extremely challenging for developing countries like Kosovo, which still depend on highly pollutant energy sources such as lignite. Therefore, Kosovo must implement such a policy as soon as possible in order to start this inevitable transition.

By not acting we increase the risk of disasters. Delaying action risks increases costs in the process of transition to carbon-neutral industries and practices. Kosovo should prioritize investments in clean resources and subsidize or facilitate investment for industries that contribute to RES investment and efficiency. Investing in a carbon-intensive economy will bring financial losses as carbon budgets will become tighter in the future. On the other hand, as the tax increases, the revenues from this tax will become an asset to the country.

With the progressive increase of the carbon tax, Kosovo will have an income that can be allocated to the fight against climate change and more efficient tax administration. Countries may focus on addressing undesirable distributional consequences directly, through the provision of compensations (e.g. lower VAT rates, tax reductions) to assist vulnerable households and industrial sectors; and/or prioritize “positive” externalities, by putting in place enabling conditions that help emitting entities increase their flexibility and adjust more easily to carbon pricing. The distribution of revenues from carbon pricing is a key factor in tax acceptability and tax administration. Therefore, Kosovo has a very challenging but necessary road ahead, and with the right policies, it will ensure sustainable economic development and general welfare.

‘WE HAVE TO PUT A PRICE ON CARBON BECAUSE THERE IS A PRICE ON CARBON, IT’S THE CONSEQUENCES TO HEALTH, TO THE ECONOMY, AND TO OUR CLIMATE.’⁵

⁴A carbon pricing design for the Energy Community Final Report, January 2021 (accessed in March, 2022)

⁵Jerry Brown, Governor of California accessible at <https://youtu.be/5fvbD0Ev7eU> (accessed in March, 2022)

METHODOLOGY

The methodology for drafting this paper has been mixed, qualitative, and quantitative. In the quantitative research part, we have received data from the Kosovo Producers Club, the Ministry of Economy, and the company Eurosteel. Quantitative data were supplemented by qualitative data which were collected using the method of semi-structured interviews.

Data collection in the quantitative research section was done with the desk research method. We then analyzed the content of the data and information obtained from the various reports, the legislation in force, the foreign legislation, the European directives, comparative studies, and the various regulations. We have categorized this data into several categories of analysis and analyzed it to draw conclusions.

In the quantitative research part, we conducted three interviews. The answers from the interviews are systematized in an excel document where the responses of each actor are analyzed by identifying frequent trends and answers across different categories such as challenges or opportunities. Finally, the research report is written taking into account the rules of academic writing. In addition to the content analysis, a contextual analysis was conducted before drafting the conclusions and recommendations of the paper.

The process of case selection was guided by the search for answers, solutions, and best practices in the world. With that in mind, each case was structured to yield a lesson, a good practice, or possibly a route towards the establishment of a carbon tax and carbon pricing. Still, not all practical lessons learned are applicable to the case of Kosovo, especially as countries vary in terms of technical capability; scope of project, expertise, and funding. Countries that have been extensively covered are Albania, Estonia, Poland, Slovenia, and Sweden.

METHODOLOGY

QUALITATIVE

QUANTITATIVE





CLIMATE CHANGE AND IMPORTANCE OF CARBON PRICING

1



The “greenhouse effect” is the warming that happens when certain gases in the Earth’s atmosphere trap heat. These gases let in light but keep heat from escaping, like the glass walls of a greenhouse, hence the name. Sunlight shines onto the Earth’s surface, where the energy is absorbed and then radiates back into the atmosphere as heat. In the atmosphere, greenhouse gas molecules trap some of the heat, and the rest escapes into space. As the concentration of these gases in the atmosphere increases, so does the earth’s temperature in general and that causes changes in our climate in a shorter period of time, compared to the natural changes.

GLOBAL EMISSIONS OF CO₂ FROM FOSSIL FUELS

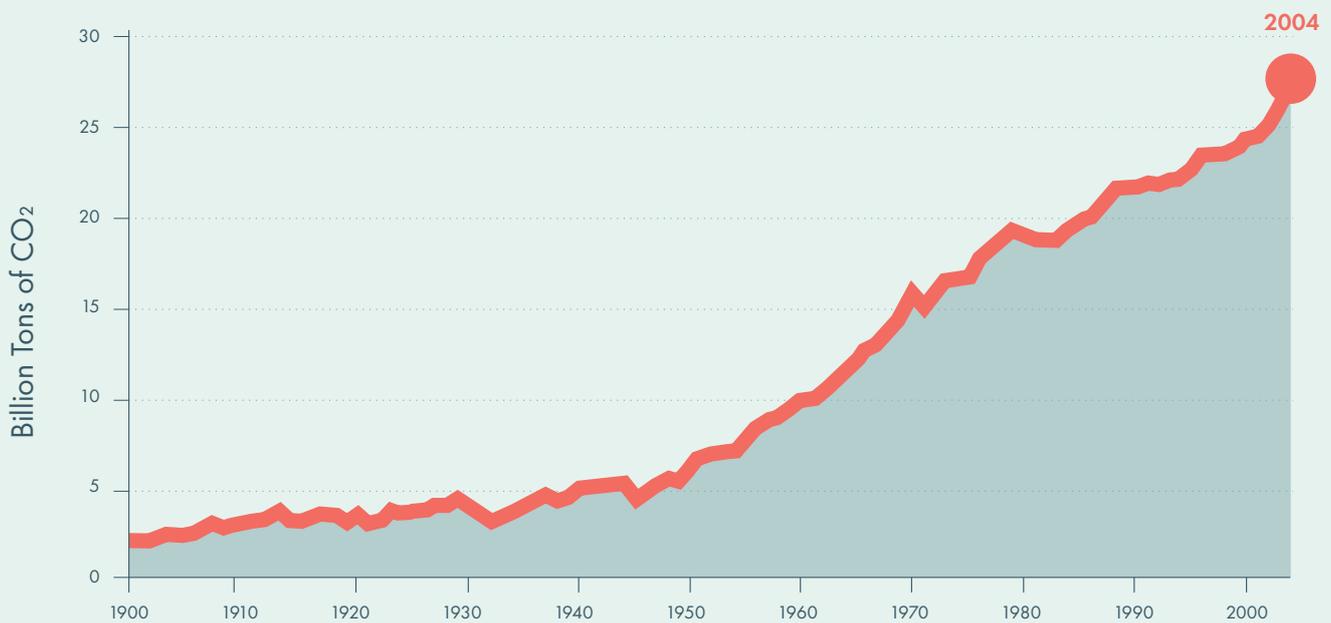


Figure 1. Global Emissions of CO₂ from Fossil Fuels⁷

The long-term stability of the climate depends on the Earth’s radiation balance. Natural emissions are kept balanced because processes that generate emissions of CO₂ (such as the respiration of humans and animals, and decomposition) are compensated by emission-capturing processes, including photosynthesis and emissions absorbed by the ocean. Greenhouse gas emissions, particularly carbon emissions resulting from the burning of fossil fuels, are the main drivers of climate change and have a range of other health and environmental consequences. Even if we stopped all emissions today, it would still take up to 200 years for the last artificially emitted CO₂ particle to leave the atmosphere.

⁶National Geographic, Environment, Article, Global Warming Overview, accessible at shorturl.at/dBILP, (accessed in March, 2022)

⁷shorturl.at/lpDFO, (accessed in February, 2022)

As a result of this phenomenon, the climate has undergone drastic changes in a short period of time. Glaciers are melting, sea levels are rising, cloud forests are dying, and wildlife is scrambling to keep pace. It has become clear that humans have caused most of the past century’s warming by releasing heat-trapping gases as we power our modern lives. These changes will only intensify over time. But the effects of climate change are not the same across the globe.

The effects of climate change are very visible, especially in vulnerable areas that are experiencing extreme temperatures, floods, sea-level rise, heat-waves and droughts. These effects have severe impacts in our lives, starting from agriculture limiting our food sources, to destruction of infrastructure leaving people homeless. With the development of the carbon-intensive industries, in Kosovo we are witnessing droughts, floods and disorder of seasons. As a result, agricultural production, infrastructure and general well-being are effected. In order to mitigate these effects in the national level, we need to make smart and creative policies.

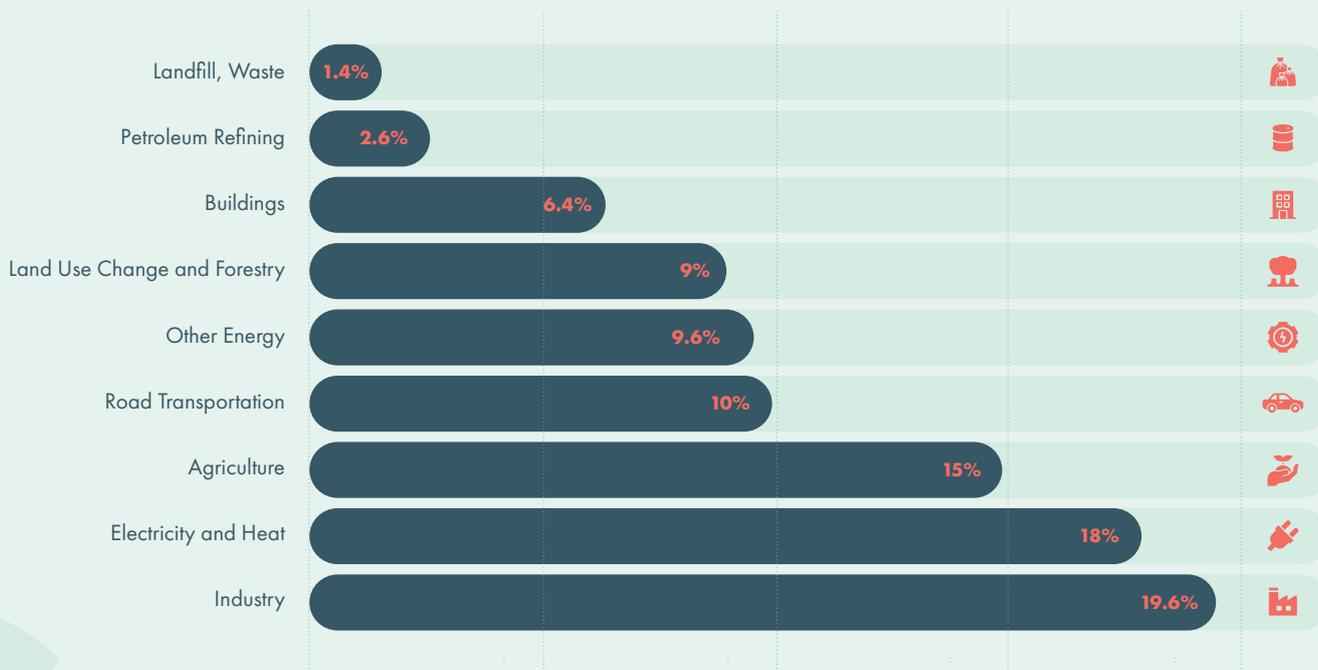


Figure 2. Carbon Footprint Infographic

⁸United Nations Handbook On Carbon Taxation For Developing Countries, (accessed in February, 2022)

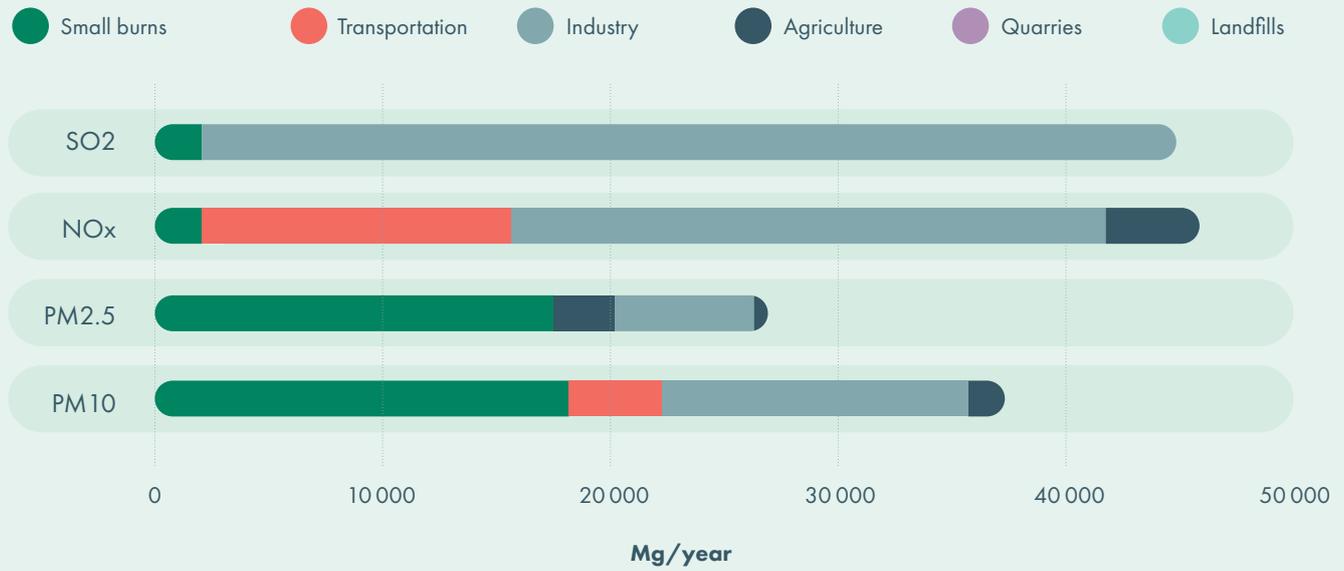


Figure 3. Emissions in Kosovo in 2018 for the main pollutants by sectors (mg / year)⁹

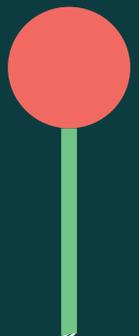
One of the most effective ways to limit and preferably reduce greenhouse gas emissions is to put a price on the sources of these emissions. Carbon pricing is one of the strongest policy instruments available for tackling climate change. It has the potential to decarbonize the world's economic activity by changing the behavior of consumers, businesses, and investors while unleashing technological innovation and generating revenues that can be put to productive use. In short, well-designed carbon prices offer triple benefits: they protect the environment, drive investments in clean technologies, and raise revenue. Many countries in the world have already adopted these policies, and many other countries are considering carbon pricing approaches, therefore, Kosovo must follow the example of regional countries and European countries in order to jointly fight this climate crisis and also be a worthy candidate for integration into the European Union.

⁹Non-technical summary of emissions inventory in Kosovo, Kosovo Environment Protection Agency, (accessed in April, 2022)

¹⁰Carbon Pricing Leadership Coalition, What is Carbon Pricing, accessible at shorturl.at/hzFI2, (accessed in February, 2022)

CARBON PRICING APPROACHES

2



In general, governments that plan to implement carbon pricing can take two policy approaches to reduce carbon emissions. First, regulatory approaches, often known as “command-and-control” policy instruments, that rely on the introduction of specific regulations to change practices. These approaches include emission standards, reporting requirements and emission licensing, among others.

A second approach can be carbon pricing. Both types of instruments are effective at reducing pollution, but there is considerable evidence that carbon pricing does so at a lower cost. Therefore most developing countries have adopted carbon pricing as an easier to manage policy.

2.1 CARBON TAX VS. EMISSION TRADING SYSTEM

In general, governments that plan to implement carbon pricing can take two policy approaches to reduce carbon emissions. First, regulatory approaches, often known as “command-and-control” policy instruments, that rely on the introduction of specific regulations to change practices. These approaches include emission standards, reporting requirements and emission licensing, among others.

A second approach can be carbon pricing. Both types of instruments are effective at reducing pollution, but there is considerable evidence that carbon pricing does so at a lower cost. Therefore most developing countries have adopted carbon pricing as an easier to manage policy.

CHARACTERISTICS	CARBON TAX	EMISSION TRADING SCHEME
Certainty of prices	Businesses are certain about the price of carbon emissions	The price of emissions is not constant price of carbon emissions
Level of emissions	The level of emissions varies	The limit of emission is by offering permits for every tonne of carbon dioxide it produces.
Mode of control	The level of carbon emitted is set per tonne which translates it on a tax on oil, electricity or natural gas.	The level of emissions is constant as there is a set of limit on the level of emissions

Figure 4. Difference Between Carbon Tax and Emission Trading System¹³

¹¹On The Theory of Externalities” Baumol and Oates, 1988, accessible at shorturl.at/arsCE (accessed in February, 2022)

¹²United Nations Handbook On Carbon Taxation For Developing Countries, (accessed in February, 2022)

¹³shorturl.at/pEKL4, (accessed in March, 2022)

2.2 CARBON TAX

Carbon taxes provide certainty over the price of emissions, but not on the level of emissions and emission reduction delivered. The government sets the tax rate charged per metric ton of emissions or per unit of carbon in fossil fuel. The regulator does not have full knowledge about how an emitter will respond to the tax (e.g., the extent an emitter will reduce its emissions to lower its tax liability) and thus it is challenging to know the resulting level of emissions reductions. Nevertheless, the price predictability of a tax has advantages and can help with forwarding planning for long-term investment.

It is relatively straightforward for regulated entities to assess their carbon tax costs (and for policymakers to estimate revenue raised by the tax) based on the tax rate and their expected emissions profile. The carbon tax targets fossil fuels such as petrol, oil, and coal used for heating purposes as well as motor fuels. The tax is calculated based on the estimated amount of CO₂ emissions covered energy products emit upon combustion, a measure that is based on the so-called carbon content of fossil fuels. Businesses can calculate the increase in the cost of their production by calculating the amount of energy they consume and the fossil fuels they use to transport their products, ensuring they have a clear idea of the costs that will come from the carbon tax. This makes the carbon tax a simple and understandable policy to adopt.

FOSSIL FUEL	CARBON CONTENT
Lignite	60-70
Oil	86.2
Gas	87
LPG	82
Natural Gas	75
Pellets	45

Table 1. The carbon content of different fossil fuels ¹⁴

¹⁴ Forest Research, Carbon Emissions of Different Fuels, accessible at shorturl.at/apfFP, (accessed in March, 2022)

¹⁵ United Nations Handbook On Carbon Taxation For Developing Countries, (accessed in February, 2022)

EUROPEAN UNION CARBON PRICING POLICIES

3



Over the years, the European Union has been a signatory of international agreements focusing on the reduction of GHG emissions caused by anthropologic factors worldwide. Starting with UNFCCC (The United Nations Framework Convention on Climate Change, 1992), the Kyoto Protocol (1997), and the Paris Agreement (2015). Although these agreements have made progress at the international level, the EU has set ambitious policies by signing the European Green Deal in December 2019.

The aim of the European Green Deal is to make the EU climate-neutral by 2050. To achieve this goal, the European Union has taken actions to reduce greenhouse gas emissions through concrete initiatives and policies. Through this deal, the European Union wants to become a global leader in combating climate change and set an example that other countries can follow. Kosovo as a country aiming to join the European Union must adopt domestic policies toward European aspirations, which are currently exclusively focused on reducing carbon emissions and reaching climate neutrality by 2050.

In recent decades the EU has issued directives targeting the cut of carbon emissions, pricing carbon as well as energy efficiency and energy transition. These directives were issued before and after the European Green Deal, which demonstrates the EU's determination on this matter. It is worth mentioning the EU ETS Directive, the Energy Taxation Directive, and the Carbon Border Adjustment Mechanism, which are associated with pricing GHG emissions.

3.1 EU EMISSIONS TRADING SYSTEM

All member states of the European Union (plus Iceland, Liechtenstein, and Norway) are part of the EU Emissions Trading System (EU ETS), a market created to trade a capped number of greenhouse gas emission allowances. With the exception of Switzerland, Ukraine, and the United Kingdom, all European countries that levy a carbon tax are also part of the EU ETS. Switzerland has its own emissions trading system, which is tied to the EU ETS since January 2020. Following Brexit, the UK implemented its own UK ETS as of January 2021. EU ETS is a market that targets highly polluting sectors in order to accelerate the transition process to clean and sustainable practices.

¹⁷Carbon Taxes in Europe, Elke Asen accessible at shorturl.at/dt34, (accessed in March, 2022)

The EU ETS covers the following sectors and gases, focusing on emissions that can be measured, reported, and verified with a high level of accuracy:¹⁸

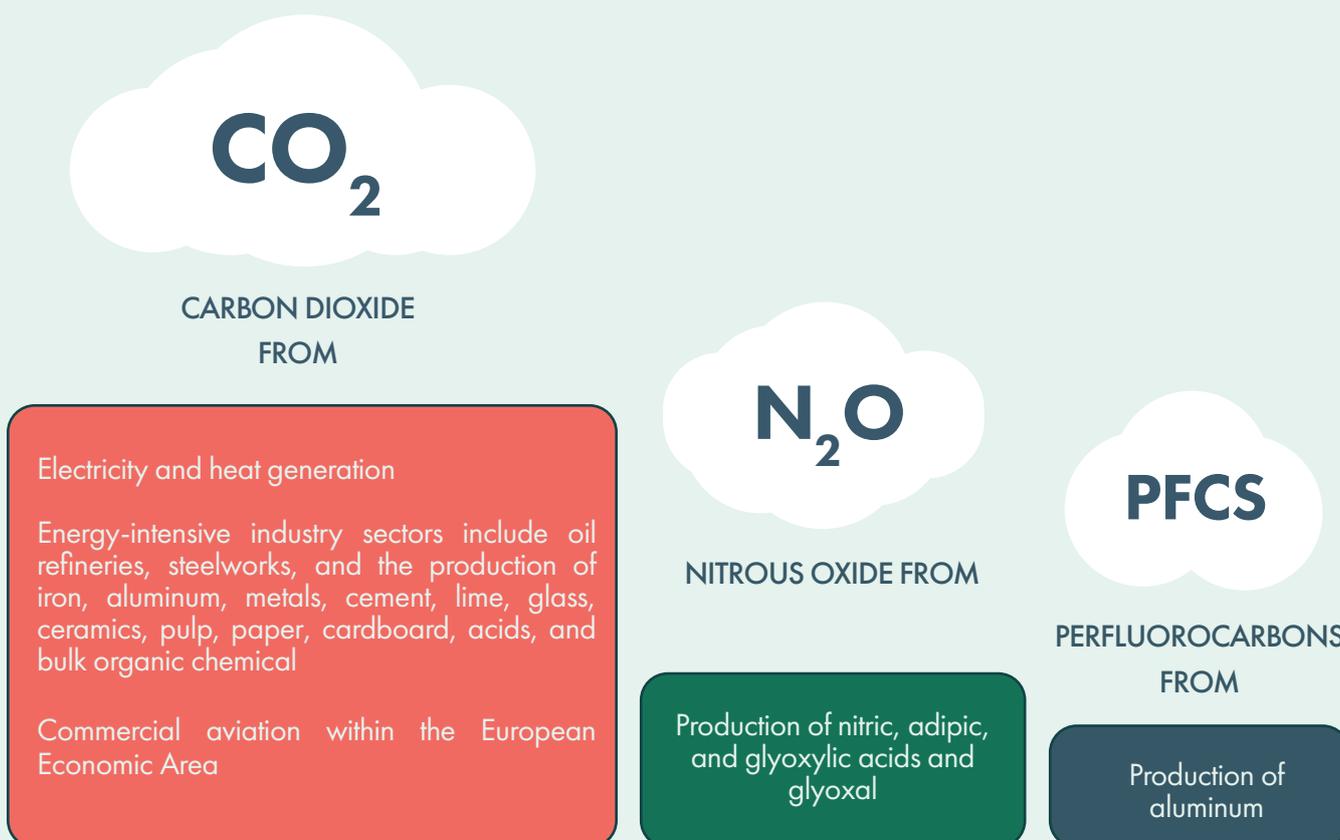


Table 2. Sectors and Greenhouse Gases covered by the EU ETS¹⁹

¹⁸European Commission, Climate Action, EU Action, EU Emission Trading System (EU ETS), accessible at shorturl.at/oCDHY, (accessed in March, 2022)

¹⁹shorturl.at/oCDHY, (accessed in March, 2022)

²⁰Carbon Taxes in Europe, Elke Asen accessible at shorturl.at/dtT34, (accessed in March, 2022)

Participation in the EU ETS is mandatory for companies in the above mentioned sectors, but

- in some sectors, only installations above a certain size are included,
- certain small installations can be excluded if governments put in place fiscal or other measures that will cut their emissions by an equivalent amount,
- in the aviation sector, until 31 December 2023 the EU ETS will apply only to flights between airports located in the European Economic Area.

But in addition to the EU ETS, European countries have seen the need for another carbon pricing tool. In 1990, Finland was the world's first country to introduce a carbon tax. Since then, 18 European countries have followed, implementing carbon taxes that range from less than €1 per metric ton of carbon emissions in Poland and Ukraine to more than €100 in Sweden. The carbon tax was implemented to cover carbon emissions in sectors that the EU ETS does not cover.

3.2 ENERGY TAXATION DIRECTIVE

The Energy Taxation Directive (2003/96/EC) — commonly known as the ETD — is the European Union's framework for the taxation of energy products including electricity, motor, and most heating fuels. As well as setting out structural rules to avoid potential distortions of competition across the EU, the ETD sets minimum rates of excise duty with the intention of encouraging a low-carbon and energy-efficient economy. Member states design their own taxes within the framework of the ETD and can determine domestic rates if they meet the ETD minimum. In 2021, this directive was revised with the purpose to align the ETD with the 2030 and 2050 targets, as part of the European Green Deal.

²¹KPMG, Home, Insights, Energy Taxation Directive, accessible at shorturl.at/mswKR, (accessed in March, 2022)

²²Carbon Market Watch, Home, News and Press, A brief explanation of the Carbon Border Adjustment Mechanism (CBAM), accessible at shorturl.at/entJK, (accessed in March, 2022)

²³European Commission, Home, Press Corner, Carbon Border Adjustment Mechanism, accessible at shorturl.at/gD458, (accessed in March, 2022)

3.3 CARBON BORDER ADJUSTMENT MECHANISM

According to the European Commission's proposal, a Carbon Border Adjustment Mechanism (CBAM) would contribute to the achievement of climate neutrality by 2050. It would operate alongside the other policy tools in the 'Fit for 55' package by addressing the risks of so-called carbon leakage resulting from the EU's increased climate ambition. Carbon leakage is the hypothetical situation whereby European producers competing in international markets would move their production and pollution to countries with less stringent or no climate policies to lower their compliance costs.

CBAM will progressively become an alternative to current carbon leakage protection measures, notably free allocation of emission allowances under the EU Emissions Trading System (ETS). It ensures an equivalent carbon price for domestic and imported production of selected goods. This way, it would also encourage trading partners to reduce their emissions. The CBAM will be phased in gradually and will initially apply only to a selected number of goods at high risk of carbon leakage: iron and steel, cement, fertilizer, aluminum, and electricity generation.

Designed in compliance with World Trade Organization (WTO) rules and other international obligations of the EU, the CBAM system will work as follows: EU importers will buy carbon certificates corresponding to the carbon price that would have been paid, had the goods been produced under the EU's carbon pricing rules. Conversely, once a non-EU producer can show that they have already paid a price for the carbon used in the production of the imported goods in a third country, the corresponding cost can be fully deducted from the EU importer. This policy will bring equal opportunities for domestic and international producers and will also target larger amounts of carbon emissions worldwide.

A reporting system will apply from 2023 for those products with the objective of facilitating a smooth rollout and facilitating dialogue with third countries, and importers will start paying a financial adjustment in 2026. Once the definitive system becomes fully operational in 2026, EU importers will have to declare annually the quantity of goods and the number of embedded emissions in the total goods they imported into the EU in the preceding year, and surrender the corresponding amount of CBAM certificates. Embedded emissions include the total carbon emissions released in the process of bringing a product to the market, from start to finish.

²¹KPMG, Home, Insights, Energy Taxation Directive, accessible at shorturl.at/mswKR, (accessed in March, 2022)

²²Carbon Market Watch, Home, News and Press, A brief explanation of the Carbon Border Adjustment Mechanisms (CBAM), accessible at shorturl.at/entJK, (accessed in March, 2022)

²³European Commission, Home, Press Corner, Carbon Border Adjustment Mechanism, accessible at shorturl.at/gD458, (accessed in March, 2022)

IMPLEMENTATION OF CARBON TAX IN KOSOVO

4



Kosovo as a developing country that aims to be part of the European Union, along its path to integration has adapted national policies and strategies to adapt to European priorities. As a Contracting Party to the Energy Community Treaty, Kosovo has the obligation to implement the energy acquis in force. The Treaty and its acquis evolve constantly to incorporate new sectors as well as update or replace older acts. For each key provision of the Energy Community acquis, Kosovo has implemented legal acts to adapt the EU Commission's recommendations. These provisions include transitioning to renewable energy sources and acts on climate change, both of which can be facilitated by a carbon pricing policy.

The European Union has been implementing the EU Emission Trading System since 2003. This system targets carbon emissions emitted by the energy sector. EU member states have also introduced the carbon tax in their respective countries as an obligation for sectors not covered by the EU ETS. Another mechanism that will be implemented in the coming years is the Carbon Border Adjustment Mechanism, which will regulate the issue of carbon leakage, to level the playing field for domestic producers and importers from countries that have no carbon pricing in place. This policy will affect the producers of Kosovo, so our country must precede this mechanism by adopting a form of carbon pricing before 2026 when this mechanism will come into force.

Carbon pricing can be introduced in different forms, depending on which is more suitable for the country. The explicit carbon pricing applies in two different ways: as an environmental tax or a carbon tax. Explicit carbon pricing entails transfer payments to the state, imposing a financial burden on the consumer, as well as additional costs of adjustment for the emitting company. Implicit carbon pricing which is used in the EU ETS can be applied as the price of a GHG emission allowance certificate. A central authority issues the allowances, serving to justify GHG emissions. The emitting installation has to own the corresponding allowances to justify emissions otherwise a penalty applies. Studies have shown carbon taxes are among the most efficient policy instruments available to mitigate climate change. The carbon tax is easily applicable to developing countries as it may be based on tax policies implemented previously.

²⁵Energy Community, Home, Implementation, Kosovo, accessible at shorturl.at/dowKN, (accessed in April, 2022)

²⁶Energy Community, Home, Legal, Energy Community acquis, accessible at shorturl.at/dzQ04, (accessed in April, 2022)

²⁷A carbon pricing design for the Energy Community Final Report, (accessed in April, 2022)

²⁸Partnership for Market Readiness (PMR) 2017. Carbon Tax Guide: A Handbook for Policy Makers. World Bank, Washington, DC. License: Creative Commons Attribution CC BY 3.0 IGO, (accessed in March, 2022)

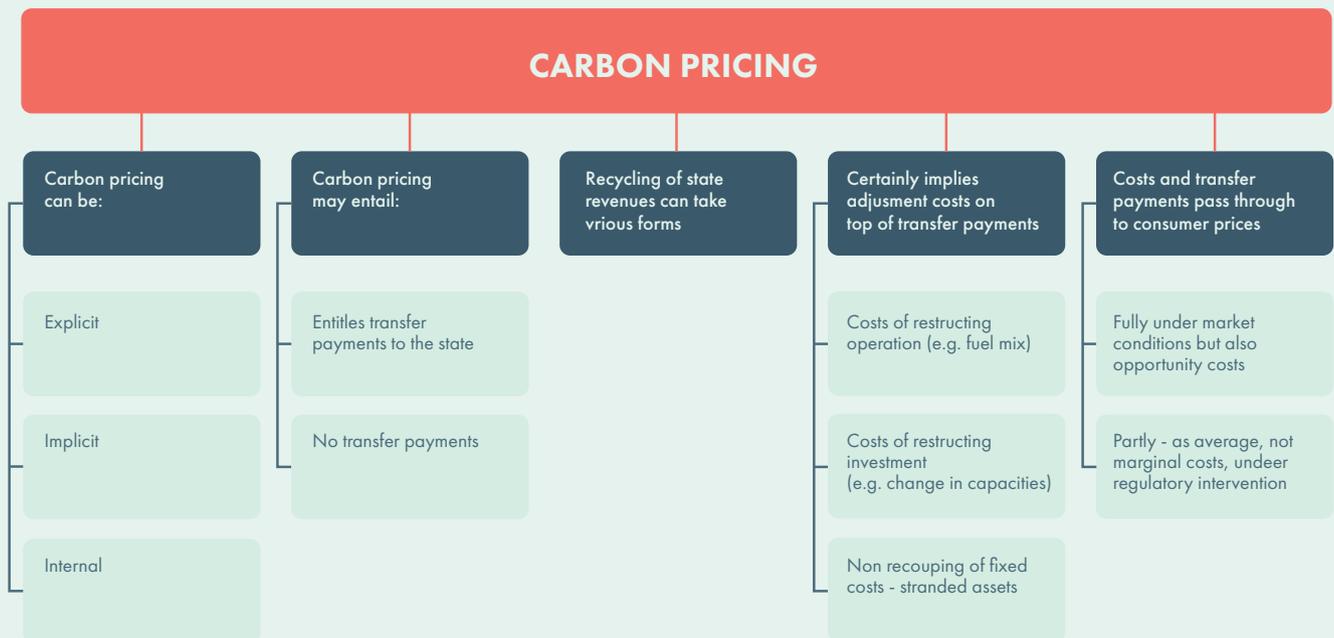


Figure 6. Different forms of Carbon Pricing ²⁹

The carbon tax sets a price on emissions, and it is up to economic agents to decide how much to emit (based on the total amount they are willing to spend). Therefore, there is no assurance that any given tax level will result in the desired reduction in greenhouse gas emissions. The limitation of the carbon tax (i.e., the lack of a carbon market that allows purchasing of permits, which can be cheaper than reducing emissions) can be overcome by using mechanisms such as offsets, i.e., allowing economic actors to pay for an equivalent amount of emissions to be reduced or “absorbed” elsewhere instead of paying the tax. An example could be that a power plant in Canada pays a farmer in Zambia to plant a quantity of trees sufficient to offset the power plant emissions. This might be cheaper than paying the tax or the significant investment required to switch fuels, and it can have substantial co-benefits (for example, on the livelihoods of people in developing countries). Compensations or exemptions from direct payment of the tax should be reduced over time so that the assessment of target achievement is more accurate.

²⁹shorturl.at/elzV5, (accessed in April, 2022)

³⁰United Nations Handbook On Carbon Taxation For Developing Countries, (accessed in March, 2022)

³¹This is an adaptation of an original work by The World Bank. Views and opinions expressed in the adaptation are the sole responsibility of the author or authors of the adaptation and are not endorsed by The World Bank. (accessed in March, 2022)

Since the impacts of the tax can be difficult to predict in advance, implementing a carbon tax should be viewed as a learning-by-doing process. If the desired policy goal is not reached after a certain period, a tax adjustment should follow. It is preferable that after a certain period of time the targets for the reduction of emissions and the expansion of the coverage of the sectors be reviewed so that the carbon tax can reach all the polluting sectors.

Policymakers should consider not only how to achieve the best technical design, but also how to ensure public acceptability. Therefore, governments interested in the implementation of carbon taxes must consider strategies to achieve immediate acceptability and permanent acceptance. Low acceptability has been an issue in failed attempts to implement carbon taxes, for example, in Washington State (United States of America), where a ballot initiative for a carbon tax was rejected in both 2016 and 2018. Similarly, in France, the gilets jaunes (yellow vests) protests in 2018 forced the government to suspend its proposal to escalate the existing carbon tax. Therefore in the case of Kosovo, the introduction of a carbon tax should come with a creative design that will ensure public acceptability taking into account tax administration, the tax rate, and the taxpayers.

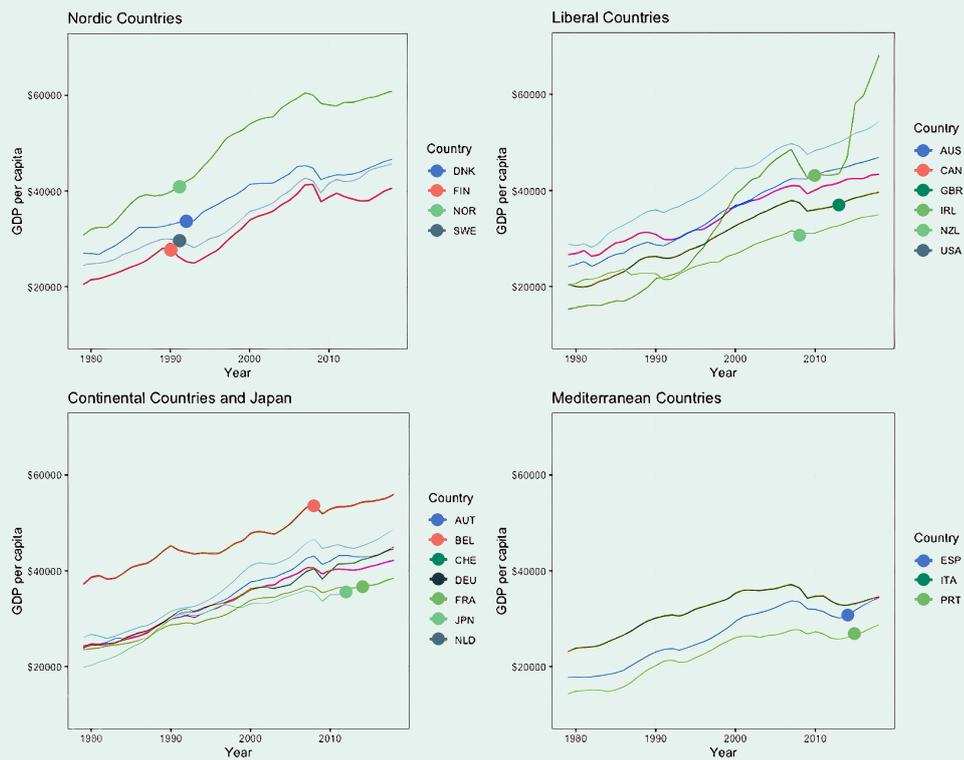


Figure 7. Gross domestic product per capita in U.S. dollars and carbon price adoption in 20 wealthy democracies Note: Points indicate the year of carbon price implementation by country.³³

³²United Nations Handbook On Carbon Taxation For Developing Countries, (accessed in February, 2022)

³³World Bank Carbon Pricing Dashboard and Organisation for Economic Co-operation and Development

4.1 TAXPAYERS

Each EU Member State has discretion as to where the tax is liable on the distribution chain, that there is flexibility in determining the extent of the tax suspension regime. Some EU countries are applying rules which result in relatively few taxpayers. Such taxpayers are normally to be found early in the distributional chain, while operators further down the distributional chain will not be involved in the tax collection. While some EU countries, such as Sweden, allow large business consumers to be taxpayers, the EU legislation does not allow private individuals to register as taxpayers. This means that petrol stations, for example, selling motor fuels to households are not taxpayers but buy the fuels already taxed in a previous leg of the distributional chain. This ensures that the tax burden does not fall on households that have no alternative but to use carbon-intensive products.

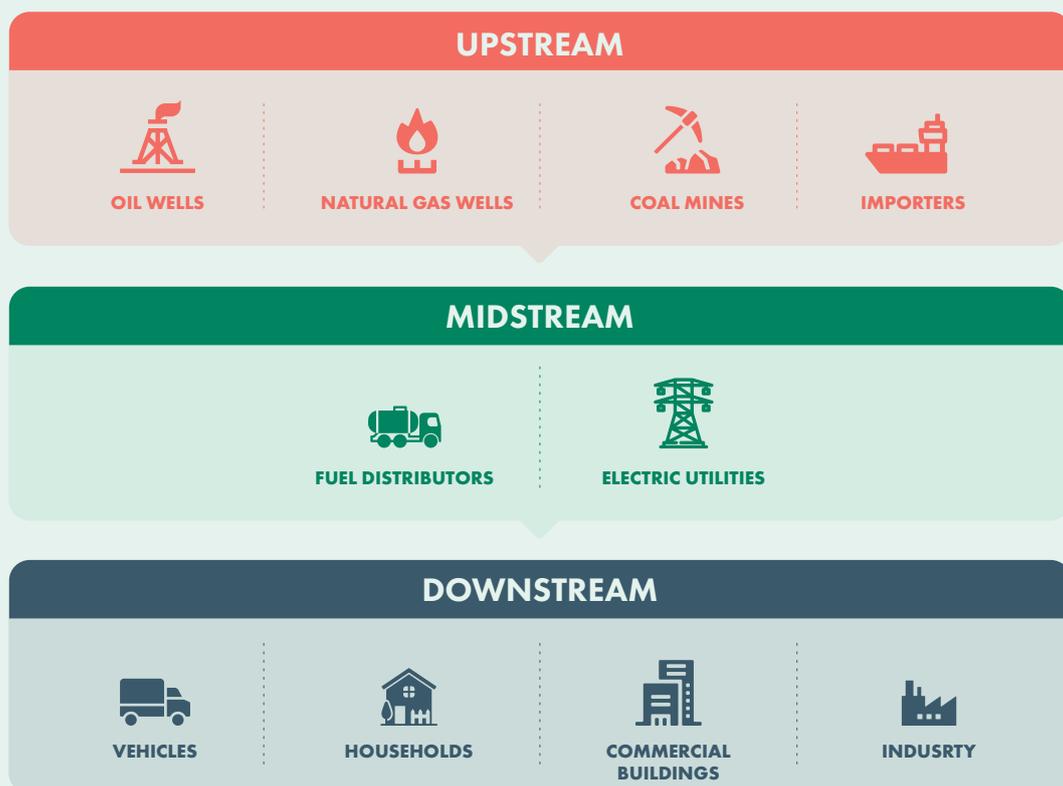


Figure 8. General Categorization of Potential Points of Regulation for Fossil Fuels³⁵

³⁴United Nations Handbook on Carbon Taxation For Developing Countries, (accessed in March, 2022)

³⁵Carbon Tax Guide: A Handbook for Policy Makers. World Bank, Washington, DC. License: Creative Commons Attribution CC BY 3.0 IGO, (accessed in April, 2022)

According to the draft of the Energy Strategy 2022-2031, the carbon tax in Kosovo will be implemented from 2025 and will tax the Kosovo Energy Corporation (KEK). Thus, businesses and citizens will not be affected by this tax from 2025. However, Kosovo, with the signing of the Sofia Declaration, has received the obligation for decarbonization until 2050, which means the carbon tax will necessarily in the coming years expand to other sectors. Polluting industries such as metalworking have already begun to invest in green technologies so that when the carbon tax comes in Kosovo or when the EU taxes them on their exports, they will continue to be competitive in international markets.

WHAT TO TAX?

The Fuel Approach	The Fuel Approach
Tax on the volume or weight units of the fuels giving rise to emissions when combusted	Tax on emissions directly at the source

Table 3. Different Taxing Approaches ³⁶

4.2 TAX RATES

Carbon tax rates are varied across all countries where it is implemented. It is worth noting that the jurisdictions that have the highest rates in place did not start their carbon tax programs at a high level. Most jurisdictions (for example, Sweden) initiated their carbon tax programs with relatively low tax rates, increasing them over an extended period. Nevertheless, most initiatives currently implement relatively low carbon tax rates, generally below US\$ 30 / tCO₂e. Ideally Kosovo should present a low carbon tax rate, but it should commit to increasing this rate progressively to meet EU rates within a certain period of time. According to the draft of the Energy Strategy and also similar to the predictions of the Energy Community the tax rate in Kosovo will be presented in 2025 at 15% of the value of the EU rate, then it will increase every 5 years until 2050 when it will reach 100% of the EU rate.

Developed countries like Sweden, Liechtenstein, Switzerland, and Finland are the countries that levy the highest

³⁶United Nations Handbook On Carbon Taxation For Developing Countries, (accessed in March, 2022)

³⁷United Nations Handbook On Carbon Taxation For Developing Countries Price, (accessed in March, 2022)

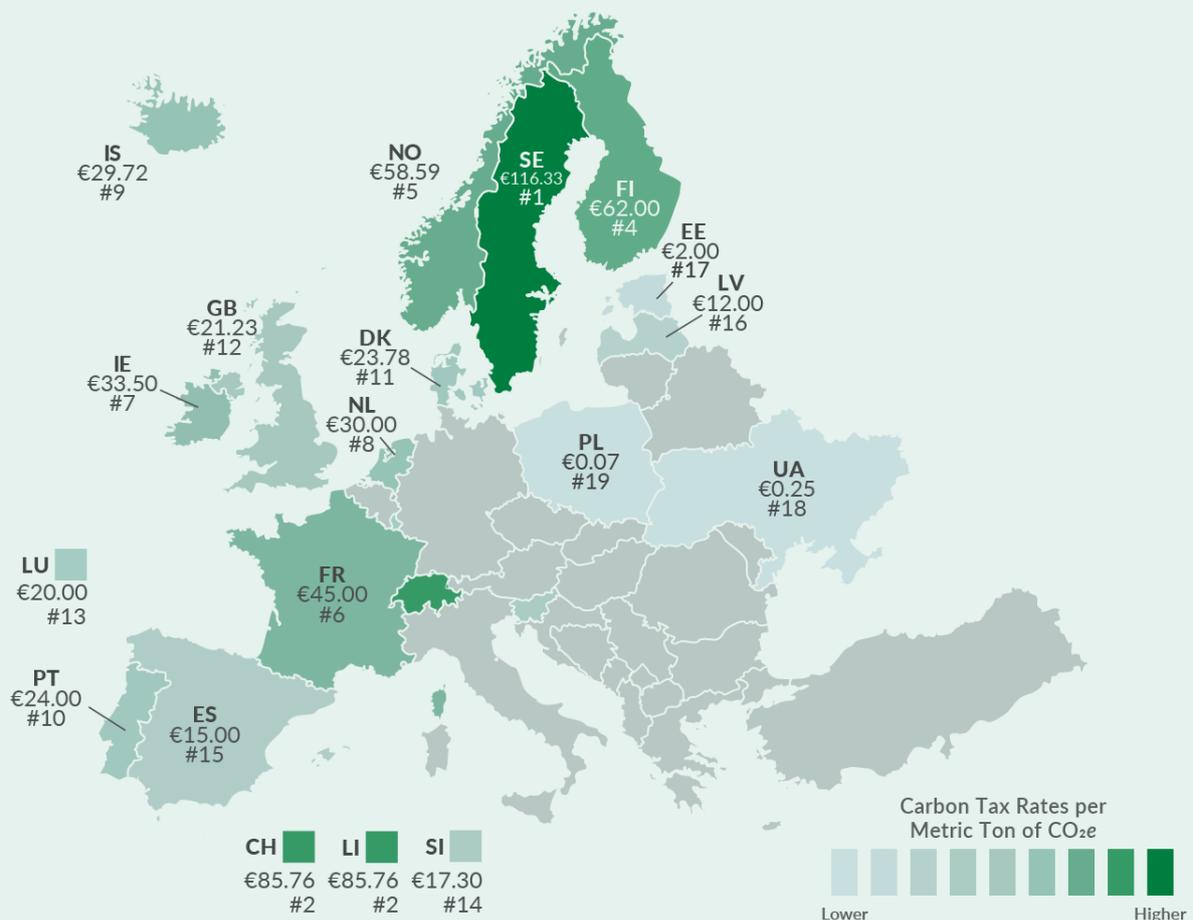
³⁸Tax Foundation, accessible at shorturl.at/lnKPY, (accessed in March, 2022)

carbon tax rates. You'll find the lowest carbon tax rates in Poland, Ukraine, and Estonia.

With the exception of Switzerland, Ukraine, and the United Kingdom, all European countries that levy a carbon tax are also part of the EU ETS. (Switzerland has its own emissions trading system, which is tied to the EU ETS since January 2020. Following Brexit, the UK implemented its own UK ETS as of January 2021.) It is noticeable that countries that still depend on fossil fuels as their main energy sources maintain a relatively low tax rate.

Carbon Taxes in Europe

Carbon Tax Rates per Metric Ton of CO₂e, as of April 1, 2021



Note: The carbon tax rates were converted using the EUR-USD currency conversion rate as of April 1, 2021.
Source: World Bank, "Carbon Pricing Dashboard."

Figure 9. Carbon Taxes in Europe³⁹

³⁹shorturl.at/juwJS, (accessed in April, 2022)

⁴⁰Eurostat, Statistics Explained, Glossary: Carbon Dioxide Equivalent, accessible at shorturl.at/rILOY, (accessed in March, 2022)

Greenhouse gas emissions are calculated through carbon dioxide equivalent. A carbon dioxide equivalent or CO₂ equivalent is a metric measure used to compare the emissions from various greenhouse gases on the basis of their global-warming potential (GWP), by converting amounts of other gases to the equivalent amount of carbon dioxide with the same global warming potential. For example, the GWP for methane (CO) is 25 and for nitrous oxide (N₂O) 298. This means that emissions of 1 million metric tonnes of methane and nitrous oxide respectively are equivalent to emissions of 25 and 298 million metric tonnes of carbon dioxide. Since ERO in Kosovo annually reports emissions from all greenhouse gases, emissions from each polluter can be measured and taxation will be more accurate.

EXCAMPLES OF EMISSION FACTORS AND HEATING VALUES FOR COMMON FOSSIL FUELS

	Emission factor* (kg CO ₂ per GJ)	Heating value **	Emissions from combustion ***
Petrol	73	33 GJ per m ³	2409 kg per m ³
Diesel oil	74	37 GJ per m ³	2738 kg per m ³
Liquified petroleum gas (LPG)	63	24 GJ per m ³	1512 kg per m ³
Fuel oil	77	40 GJ per m ³	3080 kg per m ³
Coal (anthracite)	98	30 GJ per tonne	2940 kg per tonne
Natural gas	56	38 GJ per m ³	2128 kg per 1000 m ³

Table 4. Examples of emission factors and heating values for common fossil fuels⁴¹

⁴¹United Nations Handbook On Carbon Taxation For Developing Countries Price, (accessed in March, 2022)

TPP A					
2019					
Month	Gross realized production of EE [Mwn]	Consumed coal [t]	SO [kg] Aver. 1686 [kg/MWh]	NOx [kg] Aver. 3167 [kg/MWh]	CO [kg] Aver. 1180 [kg/MWh]
January	183 282	278 588	309 013	580 454	216 272 545
February	163 644	248 740	275 905	518 262	193 100 486
March	196 373	298 488	331 086	621 914	231 720 584
April	170 190	258 689	286 941	538 993	200 824 506
May	173 463	263 664	292 459	549 358	204 686 516
June	176 736	268 639	297 977	559 723	208 548 525
July	176 736	268 639	297 977	559 723	208 548 525
August	176 736	268 639	297 977	559 723	208 548 525
September	170 190	268 689	286 941	538 993	200 824 506
October	176 736	268 639	297 977	559 723	208 548 525
November	170 190	268 689	286 941	538 993	200 824 506
December	176 736	268 639	297 977	559 723	208 548 525
TOTAL	2 111 014	3 208 741	3 559 169	6 685 581	2490 996 275

Table 5. Pollutants emitted by Thermal Power Plant A, 2019⁴²⁴²shorturl.at/nlFM6 (accessed in April, 2022)

TPP B		2019			
Month	Gross realized production of EE [Mwn]	Consumed coal [t]	SO [kg] Aver. 1686 [kg/MWh]	NOx [kg] Aver. 3167 [kg/MWh]	CO [kg] Aver. 1180 [kg/MWh]
January	408 320	498 150	744 776	1 441 370	439 760 640
February	366 860	447 569	669 153	1 295 016	395 108 220
March	414 000	505 080	755 136	1 461 420	445 878 000
April	237 080	289 238	432 434	836 892	255 335 160
May	199 360	243 219	363 633	703 741	214 710 720
June	192 640	235 021	351 375	680 019	207 473 280
July	207 840	253 565	379 100	733 675	223 843 680
August	208 320	254 150	379 976	735 370	224 360 640
September	397 470	484 913	724 985	1 403 069	428 075 190
October	352 640	430 221	643 215	1 244 819	379 793 280
November	339 300	413 946	618 883	1 197 729	365 426 100
December	414 120	505 226	755 355	1 461 844	446 007 240
TOTAL	3 737 950	4 560 299	6 818 021	13 194 964	4025 772 150

Table 6. Pollutants emitted by Thermal Power Plant B, 2019⁴³⁴³shorturl.at/nifM6, (accessed in April, 2022)

4.3 TAX ADMINISTRATION

Carbon tax is a tool used to combat the effects of climate change, but also to raise revenue. During this process, several main principles should be considered, starting from the polluter-pays principle, making sure that the tax does not fall to consumers. Following by the prevention principle, to ensure that activities within the country's jurisdiction or control do not cause damage to the environment. The precautionary principle is based on the concept that preventative measures should be put in place when there is a risk of future long-term harm to the environment that cannot be fully assessed at the time of the decision-making process. Lastly, the principle of common but differentiated responsibilities assumes that all countries are to share the responsibility for avoiding environmental degradation. The design of the tax and its administration should focus exclusively on adopting these principles and achieving the objectives that the government sets for a certain period of time.

Taxes are usually designed by the Ministry of Finance and collected by Tax Agencies or Customs Authorities. In most countries, an institutional framework is already in place to implement taxes which involves a mandate and governance structure for setting and collecting taxes. Today, all countries in the region, including Kosovo, have an excise tax on various fuels. Coordinating tax collection with other taxes or duties can facilitate tax administration. Institutions responsible for tax administration must ensure that the set goals are being met, if not they should review the tax design offer solutions.

One of the benefits of imposing a carbon tax is to generate revenues. By collecting these taxes the state is able to allocate the amount collected to green investments or subsidies in sectors where the tax may be more problematic. In Kosovo, there exists legislation on dedicated taxes, but this type of tax has always been collected together with other taxes and has ended up in the government budget. Kosovar citizens pay excise on fossil fuels and pay an ecological tax but the income from those taxes is not used for the purpose of their collection. Before the introduction of the carbon tax, in order for the collected revenues to be invested properly and to enable the transition of the polluting sectors, the implementation of the legislation on dedicated taxes must be regulated.

The dedicated tax is paid only when the citizen receives the service, for example when applying for a certain document or another service. This means that the service provided is optional and not necessary. A citizen may decide not to register his vehicle at all, if he does not agree to pay the ecological tax, but in such a case he will be exposed to the risk of being fined for irregular traffic. On the other hand, the same does not apply to taxes, as citizens have no alternative to pay or not, as is the case with property tax.

⁴⁴United Nations Handbook On Carbon Taxation For Developing Countries, (accessed in April, 2022)

Administrative simplicity and effective tax control are key issues to consider. The carbon tax itself is a simple and easily manageable policy. An approximate total of emissions is used when taxing pollutants and this simplifies the process. However, with the introduction of other features within the tax such as tax exemptions, support measures to affected households, firms, or sectors, or reductions of taxes other than a carbon tax, this process gets complicated. To ensure acceptability it is necessary to add these features so that no sector is discriminated against.

Tax collection methods are important for an easy and acceptable administration. An option would be to establish a tax collection point early in the fuel distribution chain that is the point of extraction (such as coal mine, oil drill, natural gas pipeline) or importation, in order to keep the number of taxpayers low. Zimbabwe is an example of this, although the country does not have an explicit carbon tax, it collects a Petroleum Importers Levy on petrol and diesel (a tax on energy products) and combines it with other import duties. Firms or individuals holding a procurement license to import petroleum products in bulk into Zimbabwe are liable to pay this levy, which amounts to US\$ 0.03 per liter. Collecting taxes in this way can greatly facilitate the tax administration process, but other negative effects that tax imposition may bring must be taken into account.

Another measure to consider is to ensure equality between taxpayers. One system to take as an example is Germany, where tenants and landlords are expected to share the CO₂ tax on heating. Landlords are given an incentive to invest in energy-related renovations, while tenants remain motivated to reduce their energy consumption. Another great example is the Swedish carbon taxation system. To avoid negative effects on domestic industry and carbon leakage, two carbon tax levels were introduced. The lower carbon tax level was applied to fuels used for heating purposes by the industry. The lower tax level has, since the introduction of the tax in 1991, been phased out in Sweden and was fully abolished in 2018. Such a lower tax level has been the prerequisite for a high tax level for other sectors, and one important cause of the emission reductions achieved in the high taxed sectors. Empowering local producers should be the focus of attention when designing and regulating the carbon tax.

⁴⁵United Nations Handbook On Carbon Taxation For Developing Countries, (accessed in April, 2022)

⁴⁶<https://kosovo.energy/gjermani-qjiramarresit-dhe-pronaret-do-te-ndajne-taksen-e-co2-per-ngrohje/>

⁴⁷Andersson, Julius J. 2019. "Carbon Taxes and CO₂ Emissions: Sweden as a Case Study.", accessible at shorturl.at/ivCEO



4.4 USE OF REVENUE

Apart from the fact that the main focus of the carbon tax is the reduction of carbon emissions, a secondary benefit is an increase in revenues. A good feature of the carbon tax unlike other forms of carbon pricing is that the revenue generated within the year can be calculated more accurately. Therefore, the level of expenditure that may result from this tax can be more easily planned by policymakers. This should be regulated by the formation of a green fund or eco fund so that the revenues collected from the carbon tax are spent exclusively on the service of the decarbonization process.

An economically efficient way to use the revenue is to reduce other taxes, also known as “tax recycling.” Although the rationale for this approach is a bit more complex than that of rebates, many jurisdictions have found it compelling, and the approach has been applied broadly in jurisdictions such as British Columbia, France, Norway, Sweden, and SouthAfrica.⁴⁸ In our country, this can be implemented by reducing the excise tax on fuel or by removing customs duties on electric cars.

The main alternative to revenue recycling is to use carbon tax revenues to expand government spending. For example, jurisdictions with strong renewable energy and energy conservation interests have opted to use their carbon tax revenue to subsidize programs in those fields, such as in India and Denmark.⁴⁹ Kosovo has a large number of producers that with little assistance can invest in renewable energy sources for their own needs and start the process of a green transition.

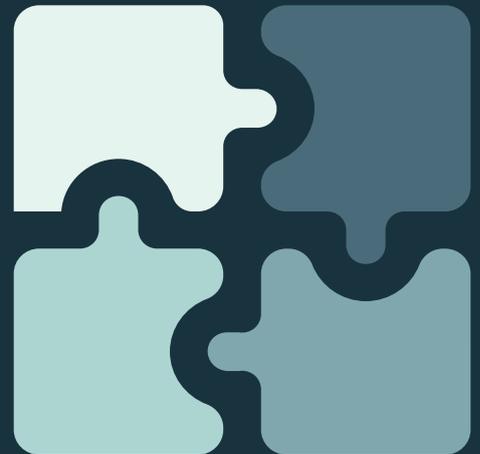


⁴⁸ Partnership for Market Readiness (PMR) 2017. Carbon Tax Guide: A Handbook for Policy Makers. World Bank, Washington, DC. License: Creative Commons Attribution CC BY 3.0 IGO, (accessed in April, 2022)

⁴⁹ Ibid.

EFFECT OF CARBON TAX BY SECTOR

5



5.1 ENERGY SECTOR

Kosovo generates electricity through the burning of coal and this currently makes Kosovo a coal-dependent country. Old power plants and gases emitted through the burning of coal, cause great damage to the environment of Kosovo. But knowing that current capacity is deficient in relation to consumer demand for electricity, and at the same time renewable power plants are low capacity, the carbon tax will cause major impacts which will force the energy sector to shift direction and focus on environmentally friendly resources.

The carbon tax would force the change of sources for electricity generation. This is because, the application of the carbon tax, would mean that electricity generated from coal would become more expensive than clean energy generated from renewable sources. Consequently, affordability would be impossible and this would cause the main effect of the carbon tax to change the course of Kosovo's energy sector.

A carbon price would make carbon-intensive fuels more expensive, making cleaner sources more cost-competitive. The power sector is widely expected to be most responsive to any carbon price signal. Most models predict that even a modest carbon price would lead to a substantial reduction in CO₂ emissions in the power sector, as it is both cheaper and more straightforward to reduce emissions there than in some other sectors.⁵⁰ Reducing these emissions is inevitable, so the most appropriate forms for Kosovo should be considered.

MILLIONS OF METRICS TONS OF CO₂ EMITTED BY THE POWER SECTOR IN 2030



Figure 10. US Power Sector CO₂ Emissions Under Different Carbon Prices⁵¹

⁵⁰Carbon Pricing 103: Effects across Sectors, accessible at shorturl.at/szJP2, (accessed in March, 2022)

⁵¹shorturl.at/sGKW2, (accessed in March, 2022)

Energy Regulatory Entity of Albania (ERE), Energy Regulatory Office (ERO), and transmission system operators of Albania and Kosovo (OST and KOSTT), supported by USAID, as part of the USA support for energy security and regional integration of Albania and Kosovo, on 21 October 2021, in Tirana, signed the Framework Agreement on Market Coupling between Albania and Kosovo electricity markets. This is a step towards integration into the common European market coupling system, which will give countries energy security.

The role of market integration is thus fundamental for enabling coal phase-out. The market coupling with Albania would help Kosovo accelerate processes such as energy transition and decarbonization.⁵² This is because Albania has almost all electricity generation based on renewable energy sources, and this would cause Kosovo to orient itself more easily and quickly from renewable sources and distance itself from fossil sources such as coal. Together with market integration, carbon pricing accelerates investment in variable RES and so wind and solar capacities increase.

**THE ROLE OF REAL INTEGRATION IS TO
ENABLE DISTANCING FROM COAL. THE
MARKET LINK WITH ALBANIA WILL HELP
KOSOVO ACCELERATE PROCESSES SUCH
AS THE TRANSITION TO SUCCESS AND
DECARBONISATION.**

The European Union has a mechanism for connecting the energy network between the countries that are part of the EU, known as market coupling. Market coupling through an algorithm determines the operator with the lowest energy price in order to be distributed in the power grid. For example, in the event of a consumption peak in France, it will import energy from the grid. Market coupling ensures that France imports Wind-Powered electricity from Germany rather than ramping up costly and pollutant thermal power plants in France.

⁵²Kosovo-Albania Energy Union - Challenges and Opportunities for the Future, INDEP, accessible at shorturl.at/bpBC6, (accessed in March, 2022)

The carbon tax will reduce the demand for electricity. With the application of the carbon tax, electricity prices will rise and the rise in prices will be directly reflected in the monthly electricity bills. For this reason, the use of electricity will be reduced due to the saving of energy consumed and which is unnecessary. The changes in demand for electricity also influence GHG emissions from the sector. Higher carbon taxes lead to lower electricity demand and lower electricity power GHG emissions.

In the case of the EU, the lowest priced will be renewable energy sources which have lower amounts of carbon emissions and consequently have a carbon tax exemption. Meanwhile, polluting sources such as power plants have a higher price due to the carbon tax and in this way, they rarely have the opportunity to export energy to the shared network. Market coupling ensures energy security, a market for EU countries that are connected to the grid.

5.2 TRANSPORT

Transport is one of the main factors releasing greenhouse gases into the atmosphere and as such is a sector that should be covered by the carbon tax. Carbon tax in the transport sector is imposed directly on fossil fuels, thus conditioning the citizen on the method of transport. With the introduction of the carbon tax, citizens will be motivated to use fewer cars, and instead of cars that depend on burning fossil fuels invest in electric cars or use public transport.

IN KOSOVO, THE VAST MAJORITY OF PRIVATE AND PUBLIC TRANSPORT IS BASED ON CARBON-INTENSIVE FUELS, SO THE TRANSITION OF THIS SECTOR IS KEY TO ACHIEVING THE GOAL OF DECARBONIZATION.

⁵³Kosovo Agency of Statistics, Import of fuels, 2009-1 - 2021-4, accessible at shorturl.at/ekqF4, (accessed in April, 2022)

Taking into consideration that in Kosovo the vast majority of private and public transport is based on carbon-intensive fuels, the transition of this sector is key to achieving the goal of decarbonization. With this degree of dependence on fossil fuels, it might seem intuitive to think that the transportation sector would be highly responsive to a carbon price. By 2021 we have imported over 660,000.00 tons of diesel and gasoline.⁵³ Considering a carbon tax of only 1.00€ per ton had been in place, over 660,000.00€ of revenue would have been generated only in this sector, thus providing income that can be invested in facilitating the transition of this sector.

Type of fuel	Value for 2021
Diesel	598,657.1 tons
Gasoline	62,270.5 tons

Table 7. Import of fossil fuels for 2021⁵⁴

However, modest and even high carbon prices face challenges in significantly driving down transportation sector emissions. First, evidence shows that consumers don't significantly change the amount they drive in response to changing fuel prices. Drivers typically have to commute the same distances to work, shopping venues, and leisure activities regardless of the cost of fuel. Second, the transportation sector does not offer the relatively easy opportunities for fuel switching that the power sector does. A typical passenger car's internal combustion engine, running on gasoline, cannot be easily converted to run on natural gas or electricity—nor can the engines in planes or shipping fleets.⁵⁵ But with the increase in fossil fuel prices, people will find it more convenient to invest in electric cars than to spend large sums on pricey gasoline or diesel car.

⁵⁴shorturl.at/ekqF4, (accessed in April, 2022)

⁵⁵Carbon Pricing 103: Effects across Sectors, accessible at shorturl.at/szJP2, (accessed in March, 2022)

5.3 INDUSTRY SECTOR

The industry sector in Kosovo is one of the sectors classified as a major source of CO₂. This pollution is mostly caused by the processing industry of metals, plastics, concrete, wood, and various chemicals. A large amount of pollution is also caused by fossil fuels for energy generation for industrial processes. Therefore the industry sector is predicted to be highly affected by a carbon pricing policy.

Industries have different factors that affect the final cost of the product they present in the market. One of the most important factors is the power supply, as the production depends on machinery that uses a large amount of energy. Businesses in different sectors will respond differently to the carbon tax. For example, an industry sector that relies more on labor will not have a significant difference in the final cost of the product, but some industries where 30% of the cost depends on electricity, cannot afford an increase in the price of energy through the carbon tax.⁵⁶ If exceptions are not included in the tax design process in Kosovo, many businesses risk closing down because they will not be able to afford the additional costs that come with this tax.

**BUSINESSES IN KOSOVO,
ESPECIALLY THE FURNITURE AND
METALS SECTOR HAVE THE HIGHEST
EXPORT RATE, THEREFORE WILL BE
THE SECTORS MOST AFFECTED BY
THIS TAX BOTH IN THE TERRITORY OF
KOSOVO AND IN EU COUNTRIES
WHERE THEY EXPORT.**

⁵⁶INDEP interview with Kosovo Manufacturing Club representative, on April 5, 2022, Prishtina.

⁵⁷Carbon Pricing Leadership Coalition, "What is the Impact of Carbon Pricing on Competitiveness?", accessible at shorturl.at/huvQU, (accessed in March, 2022)

⁵⁸INDEP interview with Eurosteel representative, on April 6, 2022, Prishtina.

A common concern is that carbon pricing may threaten business competitiveness. The adoption of carbon pricing has yet to occur at a global level and there is the chance that firms operating in countries with a price on carbon may lose business, profits, or market share to competitors that do not have to account for a price on carbon. This could result in “carbon leakage,” whereby carbon-intensive industrial investments, operations, and related GHG emissions are shifted from carbon limited markets to less stringent ones.⁵⁷ Businesses in Kosovo, especially the furniture and metal sector have the highest export rate, therefore they will be the sectors most affected by this tax both in the territory of Kosovo and in the EU countries where they export. In the metal exporting industries a small increase in energy prices would not have a major impact on production or competition in the international market, but a further 10% increase would remove Kosovo from international markets as it would not be competitive as a result of the product price. However, if the government brings the tax to a minimum rate earlier than 2025, businesses will be able to adapt and invest in greener technologies, so that when the tax is implemented in the new Energy Strategy in 2025, it will not have a negative effect on small-scale industries.

The adoption of carbon pricing can spur investment in innovation and modernization that can lead to competitive advantages and economic gain. According to the investor group Ceres, 96 of the combined 173 companies in the Fortune 100 and Global 100 have gone further to set voluntary greenhouse gas reduction targets, which has led them to accelerate their investment in energy efficiency, renewable energy, and sustainable forestry.⁵⁹ Large businesses have just started investing in renewable energy, namely solar panels. Increasing the number of prosumers, in the long run, will reduce energy costs for industries, and help diversify our energy resources.

5.4 HOUSEHOLDS

Households may be affected by a carbon tax not only from direct consumption but also from the increased price of carbon-intensive goods and services or inflationary impacts. If the imposition of the carbon tax is not well regulated by law, then businesses that will be taxed for the production of their products with polluting industrial processes will carry the tax burden to consumers by increasing the price of the product. However, a small increase in prices does not foresee a major impact on consumers, if the product is not essential.

⁵⁹The World Bank, Home, Who we are, News, “What Does It Mean to Put a Price on Carbon?”, accessible at shorturl.at/prCDP, (accessed in March, 2022)

⁶⁰Kosovo Agency of Statistics, Overview of participation of all sectors in final energy consumption (ktoe) by economic sector and year, accessible at shorturl.at/ouBL9, (accessed in March, 2022)

GIVEN THAT COAL IS THE MAIN SOURCE OF ENERGY IN KOSOVO, THE PRICE PAID BY HOUSEHOLDS FOR ENERGY WOULD INCREASE IF THE GOVERNMENT IMPOSES THE BURDEN OF THE CARBON TAX ON CONSUMERS.

Households are the largest contributors to final energy consumption for 2019 and 2020 in Kosovo.⁶⁰ Given that the main source of energy in Kosovo is coal, the price that households pay for energy would increase if the government puts the carbon tax burden on consumers. However, lower-income households will carry a higher tax, as they usually do not have good insulation in their homes, and during the winter months, they will have to spend significantly more on electricity and heating. A carbon tax that falls on households would potentially contribute positively to energy saving but negatively to the family budget.

AVERAGE ANNUAL AND MONTHLY CONSUMPTION DATA

Year	Consumption by category 2019	Measuring point (MT) pieces (number of consumers)	Annual data			Monthly data	
			Total invoicing MWh	Consumption per MT MWh	Share in consumption MWh	Total invoicing MWh	Consumption per MT MWh
2019	Household	517,486	2,515,348	4.86	57.06	209,612.37	0.405059

Table 8. Average annual and monthly consumption data for households, 2019⁶¹

⁶¹shorturl.at/ouBL9, (accessed in March, 2022)

COUNTRIES THAT HAVE IMPLEMENTED A CARBON TAX

6



Many countries in the world have started to implement the carbon tax since 1990. The number of countries that implement this tax or another form of carbon pricing will increase in the years to come because decarbonization by 2050 is not a responsibility of developed countries alone, but it is an obligation for us all. In the table below we have presented the countries that have already applied this tax.

Country	Year of Implementation	Tax Rate	Sectors Covered	Exemptions
Albania	2008	1.5 lek / liter for gasoline, 3 lek / liter for diesel, 3 lek / kilogram for coal, 3 lek / liter for solar, 3 lek / liter for fuel oil, 3 lek / liter for kerosene and 3 lek / kilogram for diesel coke ⁶²	Transport	Quantities of gasoline ⁶³ and gasoil produced domestically, but exported outside the territory.
Estonia	2000	€ 2.00 per tonne of CO ₂	All power plants (Energy)	Companies can opt to invest the payable amount in low-carbon technologies instead of paying the tax. ⁶⁴
Poland	1990	€0.07	Energy Sector ⁶⁵	
Slovenia	1996	€17.30	Applies to the same fossil fuels subject to the energy tax	Fuels used in chemical reduction, electrolytic and metallurgical processes are not taxed, and neither is coal used for non-heating purposes.
Sweden	1991	€116.33	Tax rate is levied on heating fuels (used by households) and transport fuels.	Over the years carbon tax exemptions have increased for installations under the EU ETS, with the most recent increase in exemption starting from 2014 for district heating plants participating in the EU ETS. ⁶⁶

Table 9. Carbon Tax Model

⁶²Ministry of Finance and Economy, Republic of Albania, accessible at shorturl.at/giCOX, (accessed in March, 2022)

⁶³Amendments to the National Tax Instruction, Deloitte, accessible at shorturl.at/aylP5, (accessed in March, 2022)

⁶⁴OECD (2017), OECD Environmental Performance Reviews: Estonia 2017, OECD Environmental Performance Reviews, OECD Publishing, Paris, accessible at shorturl.at/twLQ8, (accessed in April, 2022)

⁶⁵Effective Carbon Tax Rates – Poland, accessible at shorturl.at/dnKOP, (accessed in April, 2022)

⁶⁶World Bank, Putting a Price on Carbon with a Tax, accessible at shorturl.at/cvAFN, (accessed in March, 2022)

CARBON TAX RATES, SHARE OF COVERED GREENHOUSE GAS EMISSIONS, AND YEAR OF IMPLEMENTATION IN EUROPEAN COUNTRIES (AS OF APRIL 1, 2021)

	Carbon Tax Rate (per ton of CO ₂ e)		Share of Jurisdiction's Greenhouse Gas Emissions Covered	Year of Implementation
	Euro	US Dollars		
Denmark (DK)	€23.78	\$28.00	35%	1992
Estonia (EE)	€ 2.00	\$2.36	6%	2000
Finland (FI)	€62.00	\$73.02	36%	1990
France (FR)	€45.00	\$53.00	35%	2014
Iceland (IS)	€29.72	\$35.00	55%	2010
Ireland (IE)	€33.50	\$39.45	49%	2010
Latvia (LV)	€12.00	\$ 14.13	3%	2004
Liechtenstein (LI)	€85.76	\$101.00	26%	2008
Luxembourg (LU)	€20.00	\$23.55	65%	2021
Netherlands (NL)	€30.00	\$35.33	12%	2021
Norway (NO)	€58.59	\$69.00	66%	1991
Poland (PL)	€0.07	\$0.08	4%	1990
Portugal (PT)*	€24.00	\$28.26	29%	2015
Slovenia (SI)	€17.30	\$20.37	50%	1996
Spain (ES)	€15.00	\$17.67	3%	2014
Sweden (SE)	€116.33	\$137.00	40%	1991
Switzerland (CH)	€85.76	\$101.00	33%	2008
Ukraine (UA)	€0.25	\$0.30	71%	2011
United Kingdom (GB)	€21.23	\$25.00	23%	2013
	€35.91	\$42.29	34%	

Table 10. Carbon Tax Rates, Share of Covered Greenhouse Gas Emissions, and Year of Implementation in European Countries as of April 1, 2021⁶⁷

⁶⁷Source: The World Bank, "Carbon Pricing Dashboard" last updated April 1, 2021

CONCLUSIONS

The price on carbon is not a concept, but a reality that will be implemented very quickly worldwide and will affect everyone. Carbon pricing policies are being implemented and considered in most developed countries in the world, but with the introduction of the Carbon Boundary Regulation Mechanism, developing countries will be motivated to set carbon pricing as it will be necessary to keep the domestic exporting industries alive. In this way, we must anticipate this tax so that its function is complete and proper.

In Kosovo, tax collection funds are not intended to improve the categories that collect this money. With the introduction of the carbon tax, the funds raised from this tax would further improve the quality of life if they are dedicated to the environment and the elements that help in the transition and decarbonization of energy. In this way, the carbon tax would create a cycle, from collecting it through pollutants to returning that money to the community to improve the quality of life. Although Kosovo has a law on Dedicated Taxes, it has never been properly implemented. Under the existing legal framework, the carbon tax cannot be successfully imposed or enforced.

The excise tax on fossil fuels in Kosovo is not dedicated but is collected in the framework of other taxes in the Kosovo budget. Although these taxes were imposed to reduce the use of fossil fuels, such a goal was never achieved, largely because tax revenues were never returned to the taxable sector. In order to speed up the transition and decarbonization to start as soon as possible, imposing a carbon tax on fossil fuel sources used for transportation would bring significant results and further success of the carbon tax.

Export industries in Kosovo do not receive enough support from governments to increase their exports. Our exporting companies are competing in various international markets, where technologies are more up-to-date and more sophisticated. Increasing prices for basic products and other services means additional costs for Kosovar companies. In this way, these companies would continue their work and exports only if supported by the Government of Kosovo through subsidies and grants, providing them with the means to be competitive with the foreign market.

Kosovo still has a negligible share of renewable energy sources in total energy production. With the slow pace of investment in RES, diversifying the energy sector is becoming a difficult task to achieve. Investments in this branch of the energy sector do not only mean benefits in terms of environment and health but also in the creation of new jobs and further advancement towards European directives.

Kosovo-Albania Energy Union reduces operating costs and increases opportunities for investment in renewable energy sources. In a common market, maneuvering opportunities in operation are easier because it creates a variety of generations from different energy sources. All of this reduces operating costs and paves the way for electricity produced from environmentally friendly sources. These resources, which are already encouraged and advanced by the latest energy packages around the world, have great potential in the target market between Kosovo and Albania. Renewable resources are the future of the energy sector and their use is essential for both countries.

One of the main pillars on which the Energy Community is built is the integration of the regional market. The Energy Community was created for obvious reasons, including the liberalization of markets and their integration into a single market. The integration of markets into a single one presents great advantages in the proper functioning of

all participating parties. The Energy Community Treaty clearly states that: “The main objectives are to build a stable and regulatory market framework, capable of attracting investment, to create a single regulatory space for trade, to improve the security of supply, to improve the state of the environment, and develop the energy and gas market in a wider geographical region.” But to achieve these goals of the Energy Community Treaty, one must first look at the legal bases, constitutions, and strategies of states aiming at the common integration of markets.

The generating capacities of electricity from renewable sources in Kosovo are not at a satisfactory level. There are already new projects from foreign investors using renewable sources to generate electricity, but coal is still very dominant. In this way, seeing that Kosovo is committed and has undertaken to be a decarbonized country by 2050, such an imbalance of resources must be changed.

The Kosovo Energy Efficiency Fund is a very important fund in the transition and decarbonization processes. This is because this fund pushes forward energy efficiency projects, which directly affect the reduction of electricity use and push forward incentives to save electricity by consumers. Although this fund has a budget of only 19 million euros, several projects are being implemented within this fund. The fund is focused on public buildings at the local level and with the aim of expanding its reach in the future.



RECOMMENDATIONS

- 1** The Government of Kosovo should create an Eco Fund. The funds collected from the carbon tax should be returned to the community, but with investments that directly affect the improvement of living conditions, increased comfort, and other processes that protect the environment. Investments in renewable sources, an increase in energy efficiency measures, and acceleration of energy transition are some of the categories in which Eco Fund should allocate the amount of money collected from the carbon tax. It is very important that the funds collected from the carbon tax go directly to the improvement of the environment and not to other investments which are not related to the reduction of carbon emissions.
- 2** The Government of Kosovo should prepare the legislation that regulates the establishment of the carbon tax in our country. In order for the introduction of the carbon tax to have no delays in its implementation, the Government of Kosovo should precede the preparation and regulation of legislation that paves the way for the introduction of the carbon tax in the energy, transport and household sectors. Also, the legislation would introduce regulation but also greater clarity and transparency regarding the functioning of the carbon tax and the manner of its implementation.
- 3** The carbon tax should not only be imposed on emissions from the electricity sector, but rather should be a comprehensive measure that also targets the transport sector. The transport sector as it depends on fuel combustion is classified as one of the most polluting sectors. As one of the most polluting sectors in Kosovo, transport must be held accountable for the emissions it produces. This would ensure the generation of tax revenues, but would also facilitate the green transition process for the sector, as it would motivate sustainable mobility.
- 4** The Government of Kosovo should consider the possibility of imposing fiscal and customs affirmative measures on electric and hybrid vehicles. The abolition of customs duties on electric cars would increase the interest in investing in electric cars and moving away from cars operating through the burning of fossil fuels. This would contribute to the reduction of carbon emissions and would directly help reduce environmental pollution. Such a policy will facilitate the energy transition, create new jobs and enable the acceleration of the decarbonization process.
- 5** The Government of Kosovo should consider supporting domestic exports, especially in the context of recovery, and develop better policies. These policies would enable businesses to increase their production capacity, workforce capacity, and advance the willingness of businesses to invest in solar panels and increase energy efficiency measures.

- 5** This would create conditions for local businesses to be even more competitive in the foreign market, as equipment improvements, investment in clean energy and efficiency measures would increase the efficiency of the company and at the same time produce quality products. higher.
- 6** Kosovo and Albania should accelerate the merging of energy markets with each other. Connecting the market with Albania would enable easier access to resources, better market preparation and further integration of renewable energy sources and would increase the effect of the carbon tax. Acceleration of carbon removal, energy transition and completion of decarbonization are some of the main benefits that the market union with Albania will bring in the implementation of the carbon tax. Among other things, the carbon tax will include a larger market, in which actors from both countries can further regulate the energy sector.
- 7** Kosovo and Albania should prepare a joint energy strategy. The joint energy strategy is in the interest of joint market planning and the common geographical region. Moreover, such a merger also contributes to plans for further market integration with the region. The larger the market, the greater the benefits, security and flexibility. Therefore, the union between the two countries should not be the only goal, but should be the beginning of a necessary process of connecting the region with the European market.
- 8** The Government of Kosovo should increase investments in electricity generation projects through renewable energy sources. But in addition, the Government of Kosovo urgently needs to approach foreign investors to increase electricity generation capacity through environmentally friendly sources. In this way, it contributes to decarbonization and energy transition as vital processes for the future of humanity.
- 9** The government should increase cooperation with the Kosovo Energy Efficiency Fund. Energy efficiency has a key role in the decarbonization process. The Government of Kosovo should allocate funding, either from the country's budget or from the dedicated fund for the carbon tax to advance the fund's mission in order to facilitate the energy transition in Kosovo.
- 10** An educational program should be drafted by the Ministry of Education in cooperation with the Ministry of Economy in the field of energy education. It should include classes on energy transition and decarbonization, as well as carbon pricing. In addition to secondary and primary education, the program should be extended to higher education in cooperation with institutions such as the Center for Energy and Sustainability at the University of Prishtina and other centers within faculties and educational institutions.



"The views expressed in this publication are those of INDEP and in no way can be considered as the opinions of the Kosovo Foundation for Open Society."

