

Taxation and decarbonization

A climate proposal capable of increasing the tax competitiveness and economic freedom

DECEMBER 2024

Executive summary

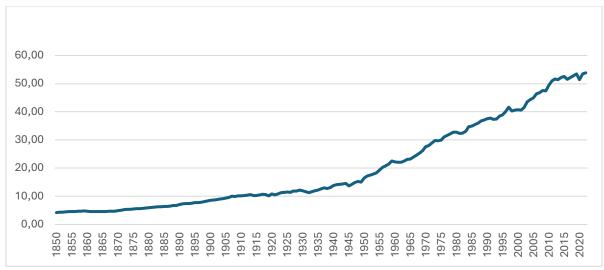
- Greenhouse gas emissions have risen sharply, but to implement the degrowth proposals being put forward in response would be a step backwards that would sink production and, with it, welfare. The coronavirus pandemic itself served as a test of the effect of degrowth policies: economic activity slowed down and emissions fell by 4%, but world poverty increased by 60 million people. For Spain, a degrowth strategy would reduce GDP by 24%, according to Fedea estimates.
- The best way to reconcile decarbonization with social welfare and economic prosperity is to boost market freedom. In the Yale University Environmental Performance Index, the score for the most open economies is 64 percent higher than the score for countries with less market freedom.
- Greater economic freedom leads to a higher level of development and, at the same time, a richer country is more likely to successfully reduce the environmental footprint of its production. Over the last fifteen years, CO2 emissions have fallen by 14% in countries with higher income levels, with a 20% drop in per capita terms. Research finds that raising economic freedom levels by 1% reduces carbon emissions by 0.3%.
- It is not sensible to approach climate management as an apocalyptic issue to which enormous economic resources must be devoted. The Nobel Prize winner in economics specializing in environmental issues, William Nordhaus, estimates that the cost of climate scenarios ranges between 1% and 2% of GDP. Therefore, instead of proposing large spending programs, the most sensible and efficient approach is to formulate intelligent, efficient and realistic decarbonization proposals.
- To accelerate decarbonization, it is proposed to implement the so-called decarbonization acceleration funds or FADs. These are financial instruments designed to incentivize investment in property, plant or equipment. Companies contributing capital to these funds would not pay taxes on the income or interest generated in this way, which would reduce capital costs and, in practice, lower the cost of making new business investments. Logically, the renewal of the capital endowment makes it possible to generalize new, more efficient, cleaner and innovative solutions, which has the effect of accelerating economic activity and, at the same time, reducing the energy intensity of production.
- As complementary reforms to the so-called decarbonization acceleration funds, rules could be implemented to allow full and immediate depreciation of corporate investments or changes in the corporate income tax to exempt reinvested corporate profits.

- Tax rebates for decarbonization or RFD are also proposed, focusing on the sectors
 that account for 85% of greenhouse gas emissions: construction, manufacturing,
 transportation, energy and electricity, industry and agriculture. It is proposed
 that investments made in technologies or equipment to reduce production
 emissions be fully subsidized, up to a saving equivalent to five percentage points
 of the general corporate income tax rate. The fiscal cost of the measure would be
 around 6,000 million, so that its budgetary fit is manageable.
- Other tax proposals that could facilitate decarbonization would include (1) exempting from taxation the profits obtained by companies that develop disruptive technologies that facilitate an aggressive reduction in greenhouse gas emissions, understood as a 50% drop in relation to pre-existing technologies and limiting the exemption to a period of ten years, (2) introducing tax discounts for environmental philanthropy, (2) introducing tax breaks for environmental philanthropy, in line with the rules applied in countries such as the United States, where private financing of conservation projects is encouraged, or (3) exempting from taxation the purchase and sale of shares in companies involved in sectors that account for 85% of greenhouse gas emissions, in order to facilitate greater investment and competition in these sectors.

1. More economic freedom, better environmental conservation.

Greenhouse gas emissions have grown significantly over the last few decades. As can be seen in the figure below, this increase was barely halted by the coronavirus pandemic in 2020. In any case, despite this halt, greenhouse gas emissions exceed 50 billion tons, an increase of more than a quarter in the last decade alone.

Figure 1. Global evolution of greenhouse emissions, in billions of tons.



Source: Our World in Data.

In Johan Norberg's opinion, this trend is worrying, since the increase in emissions may contribute to the appearance of "more extreme weather events, for example more droughts and more floods". He also stresses that the accumulation of emissions may "induce tipping points that would lead to rapid and irreversible changes in the conditions of life on Earth". ¹

In recent years, numerous currents have emerged that promote different strategies for climate action. One of the formulas that has become most popular in recent years is the school that cultivates the thesis of degrowth. This is a socio-economic theory advocated mainly by leftist authors and activists who advocate the controlled and planned reduction of production and consumption. Proponents of degrowth argue that perpetual economic growth is unsustainable, an assumption they justify by speaking of the ecological limits of the planet. They believe that the overexploitation of natural resources and the greenhouse gas emissions resulting from mass consumption are leading us into an environmental crisis and propose a reorientation of the economy towards less dependence on the consumption of material goods, thus reducing environmental impact and promoting more sustainable lifestyles.

Norberg himself believes that the promoters of degrowth have been able to test the practical application of their ideas in the wake of the pandemic. As mentioned above, emissions were curbed in 2020 at the cost of halting numerous global production chains for goods and services. The result was indeed a drop in emissions of around 4%. This is the largest reduction in history. However, the costs associated with this correction were immense.

According to data available from the World Bank, between 2019 and 2020, the number of poor people increased by 60 million, or nearly 10%. In 2023, 691 million people will live in extreme poverty in the world, equivalent to 8.6% of the global population. This level is just below the levels recorded before the pandemic. In other words, because of a

¹ Johan Norberg, The Capitalist Manifesto. Why the global free market will save the world, 2024, Ediciones Deusto.

social experiment that would be similar to what degrowth activists claim, the world has lost three years in the fight against poverty. ²

Moreover, this recovery has been uneven, as while middle-income countries have returned to normalcy, it is the countries with lower income levels, more affected by fragility and instability, that are in a worse situation than at the advent of COVID-19.

In order to achieve compliance with the Paris Climate Agreement at the stroke of *degrowth*, it would be necessary to activate pandemic-like measures every year for a period of a decade. "This shows that the solution was never to stop flying or settle for less. Large emissions are embedded in our social infrastructure and our energy systems, so the solutions must be technological and not restrictive," notes Norberg. ³

Along the same lines, a Fedea report has estimated the cost of pursuing a *degrowth* agenda in Spain. According to the results, the strictest interpretations of degrowth, such as reducing the consumption of goods and services in favor of leisure or limiting economic growth, lead to significant negative economic consequences. Between 2019 and 2050, the proposal to replace consumption with leisure reduces household consumption capacity by 17% and GDP by 24%, while curbing total factor productivity impoverishes households by 42% and plummets GDP. Penalizing fossil fuels, although less drastic, also impoverishes households (-3.5%) and reduces GDP (-1.5%). The study demonstrates the serious economic costs of these strategies, questioning the viability of the degrowth promoted by the radical left, which seeks to reverse the market economy. ⁴ It seems evident, therefore, that this type of theories should be discarded.

However, while *degrowth* is a particularly radical and unfocused theoretical formulation, the idea that the market economy is in structural contradiction with environmental preservation is a thesis shared by many moderate authors, as well as by governments in much of the developed world. As Diana Furchtgott-Roth points out, Western policies that discourage market-based economic production and its correlative energy consumption may well end up condemning millions of people to poverty. ⁵

Reliable, secure and relatively affordable energy supplies are crucial for economic growth, which in turn is an essential pillar for improving people's lives. The insistence that developing countries refrain from using conventional fuels, such as natural gas, coal and nuclear power, limits the ability of these emerging economies to consolidate industrialization processes and raise the living standards of their citizens. Energy has been elemental in providing a supply that enables the continuous and regular operation of factories, businesses, hospitals, homes, etc. Therefore, the adoption of new solutions with a lower environmental impact, such as renewable energies, must be carried out gradually and with market criteria. Otherwise, the economies of the West risk

² For more information, please refer to the following World Bank information note https://blogs.worldbank.org/en/opendata/poverty-back-pre-covid-levels-globally-not-low-income-countries.

³ Johan Norberg, The Capitalist Manifesto. Why the global free market will save the world, 2024, Ediciones Deusto.

⁴ J. Andrés, J. E. Bosca, R. Doménech and J. Ferri, "The Welfare Effects of Degrowth as a Decarbonization Strategy", Fedea, 2024.

⁵ Furchtgott-Roth, D., "Developing Countries Need Modern Energy, Not Climate Reparations," *The Heritage Foundation*, 2022. Available at: https://www.heritage.org/energy-economics/commentary/developing-countries-need-modern-energy-not-climate-reparations.

stagnating and developing countries may end up permanently trapped in a spiral of mediocrity that blocks their way out of misery.

Industrial development and upward economic mobility in developing countries depend on access to a competitive energy *mix*. Only on this basis will it be possible to consolidate production structures that are sufficiently sophisticated to progressively reduce the environmental footprint of production.

Economic freedom, productive efficiency and the environment

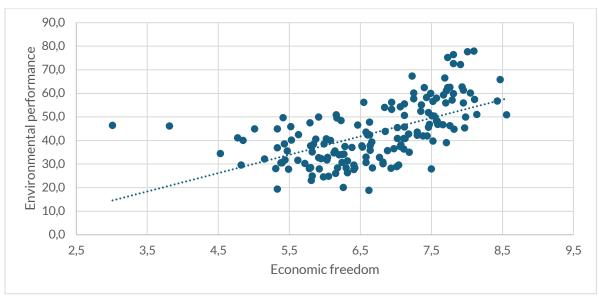
The common denominator of the vast majority of climate strategies put forward by national governments and international organizations revolves around the general adoption of emission reduction targets. The problem is that, in order to make these targets compatible with development and the well-being of the population, it is also necessary to adopt measures aimed at facilitating the decarbonization of production based on solutions that bring about technological innovations capable of minimizing the environmental impact of production based on more efficient solutions on the supply side of goods and services.

Countries with higher levels of economic freedom have higher levels of environmental performance. This is evidenced by Figure 2, which shows a strong positive correlation between the Fraser Institute's Index of Economic Freedom⁶ and Yale University's Environmental Performance Index⁷. The former scores from 0 to 10 points the degree to which each country's policies and institutions favor a climate that respects voluntary exchanges, with freedom to participate in markets and to compete, all within a general context of legal security and respect for private property. The Environmental Performance Index provides a comprehensive measure of sustainability, based on 58 indicators and presented in scores ranging from 0 to 100 points.

Figure 2. Relationship between economic freedom and global environmental performance, 2021.

⁶ Gwartney, J., Lawson, R., Murphy, R, et al., "Economic Freedom of the World", Fraser Institute, 2023.

⁷ Block, S., Emerson, J. W., Esty, D. C., de Sherbinin, A., Wendling, Z.A., et al., "2024 Environmental Performance Index," *Yale Center for Environmental Law & Policy*, 2024.



Source: own elaboration based on Fraser Institute and Yale.

From the crossover between the Index of Economic Freedom and the Yale University studies, we can conclude that countries that opt for a more intensive capitalist model also achieve better results in metrics such as air quality, drinking water, waste management and many other metrics related to environmental preservation and mitigation of climate impacts

This strong correlation between greater economic freedom and better environmental performance can be explained by three main factors:

- Private property and its incentives. Private property and the market system's own incentives make people take better care of their environment. When individuals own and manage resources directly, they have a much stronger motivation to preserve them and improve their condition, avoiding their overexploitation and fleeing from the inefficiencies and dilemmas of community ownership and management.
- Open and competitive markets that foster innovation and efficiency. Competition drives investors and producers to develop cleaner technologies and more efficient processes. They do so because this improves productivity and leads to higher sales but, at the same time, the process also has the effect of reducing environmental impact and mitigating the footprint of economic activity on natural environments. Hence the fact that more liberalized economies have higher levels of investment in research and development, which facilitates the creation of greener and more sustainable technologies.
- Greater wealth facilitates the financing of mitigation and adaptation tools. Economic growth, derived from economic freedom, provides the resources needed for continued investment in better environmental protection. Mitigation and adaptation is as necessary as it is costly. That is why richer countries can afford to implement some environmental regulations whose implementation cost would be unaffordable in less prosperous economies. They also have the ability

to finance green initiatives that favor conservation, such as the modern water treatment and waste management systems we see in the developed world. Added to this are social preferences, as people from wealthier and more affluent societies tend to prioritize environmental protection when their basic needs are adequately met.

As we can see in Figure 3, differences in economic freedom can lead to very different environmental outcomes across countries. Under market models, there is a greater capacity for environmental management and adaptation to natural disasters, in contrast to what happens in less free economies, which tend to face worse indicators in this field. This contrast underscores the importance of economic freedom as a variable capable of underpinning both economic prosperity and long-term environmental sustainability.

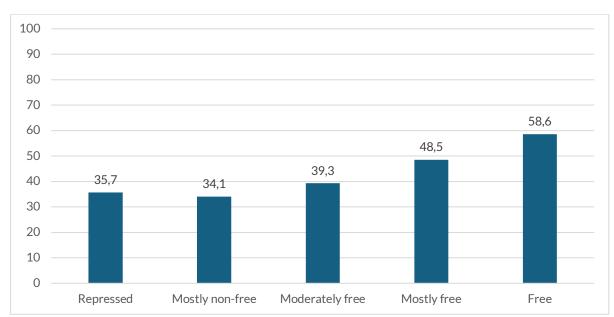


Figure 3. Environmental performance by quintiles of economic freedom, 2021.

Source: own elaboration based on Fraser Institute and Yale.

In the specific case of Spain, it is in the fourth quintile of the Index of Economic Freedom ("mostly free" economy) and in the last quintile of the Environmental Performance Index ("clean" ecosystem). These results appear to be positive. However, it is worth noting that the environmental performance score (56.6 points) is close to the cut-off point that separates the fourth from the fifth quintile (55.3 points). In the same vein, if we consider only the developed economies that are part of the OECD, we see that Spain is relegated to 26th and 24th place in the Index of Economic Freedom and the Environmental Performance Index, respectively. ⁸ Therefore, there is much room for improvement in terms of economic liberalization, from which we can deduce the possibility of achieving better environmental indicators based on a reform agenda based on market incentives.

⁸ See table 1 in the appendix for further details.

2. The role of growth. As the preceding pages show, having formal and informal institutions that favor the development of freer and more competitive markets is not incompatible with promoting environmentally friendly policies. In fact, the evidence shows that what is most desirable is the consolidation of a market model that, in addition to greater prosperity, brings with it better environmental performance. Figure 1 shows the evolution of global emissions. The trend was clearly upward. However, this exercise ignored the differences by country. This is not a minor issue, since economies with higher income levels have been reducing their contribution to greenhouse gas emissions, especially carbon dioxide or CO2, for two decades.

Specifically, in the last fifteen years, these countries have reduced their CO2 emissions by 14 percent. Therefore, the growing trend in recent years is not due to the richer countries, but to the fact that middle-income countries are increasing their production without yet achieving a lower volume of greenhouse gas emissions. This is reflected in Figure 4.

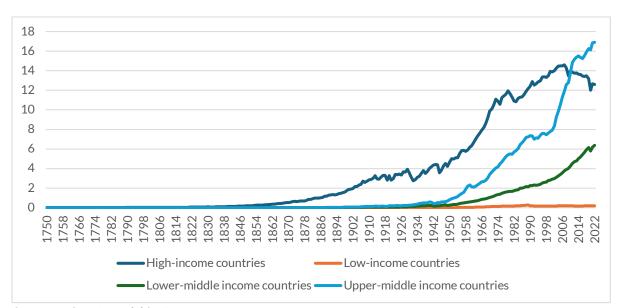
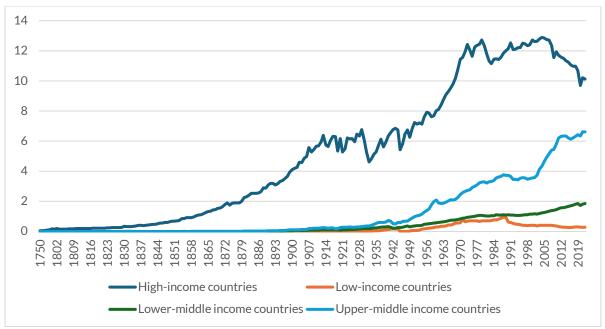


Figure 4. Evolution of CO2 emissions by country type, in billions of tons.

Source: Our World in Data.

The key to the positive evolution of developed countries lies in innovation and efficiency. These are economies that have been able to take advantage of their economic and technological resources and use them to promote a productive model capable of bringing about very significant advances that lead to greater sustainability. In recent years, as shown in Figure 5, developed countries have managed to reduce their per capita emissions indicator by almost 20 percent. This significant decline in per capita emissions reflects a firm commitment to environmental protection and more responsible management of natural resources.

Figure 5. Evolution of CO2 emissions per capita, by type of country, in tons.



Source: Our World in Data.

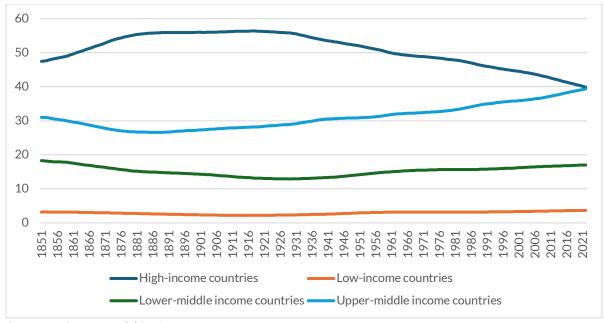
That is, as countries with deeper market economies achieve higher income levels, they not only increase their capacity to invest in infrastructure and services, but can also facilitate the introduction and deployment of innovative new technologies, ranging from renewable energies to advanced energy efficiency systems, playing a crucial role in reducing greenhouse gas consumption. The adoption of these technologies not only reduces the carbon footprint, but also promotes sustained economic growth. Furthermore, investment in research and development enables these countries to remain at the forefront of environmental solutions, consolidating their position as leaders in this field.

This trend reflects the fact that, while developed countries have managed to reduce their contribution thanks to free markets and the innovation they produce, in lower-income countries the process is still in the development phase. These economies have not reached the levels necessary to effectively mitigate their environmental impact.

Thus, the growth and wealth derived from economic liberalization are the greatest promoters of climate and decarbonization outcomes by facilitating the adoption of clean technologies and the spread of efficient practices. In stark contrast, interventionist policies that limit economic and market development can hinder the process, preventing developing countries from achieving the capacity to reduce their environmental impact. It is therefore crucial to evaluate global strategies and consider alternative approaches that promote sustainable economic growth and technological innovation to more effectively address the challenge of climate change.

Figure 6. Evolution of contribution (%) to global mean surface temperature change by country type. 9

⁹ The measurement takes into account the change in global average surface temperature as a result of the amount of cumulative emissions of three gases: carbon dioxide, methane and nitrous oxide.



Source: Our World in Data.

The trend of higher efficiency and lower pollution in countries with developed economies can be explained by the Environmental Kuznets Curve (or EKC). This theory suggests that, in the early stages of economic development, environmental degradation is increasing in parallel with rising emissions, reflecting a state of affairs in which countries prioritize economic growth over environmental protection.

However, as countries reach a higher level of income and development, they begin to have the resources and technology to reduce their environmental impacts. In this phase, institutions are strengthened and stricter environmental policies are implemented, promoting sustainable practices and facilitating the adoption of cleaner technologies. Thus, the Kuznets environmental curve describes the inverted U-shaped relationship between economic development and environmental preservation. Lower-income countries are still on the upward side of the curve, increasing their emissions as they accelerate their emergence from poverty, while developed countries are on the downward side, as they have a greater capacity to reduce their environmental impact based on greater wealth and innovation.

What role does economic freedom play in shaping the environmental Kuznets curve? The relationship between economic freedom and environmental performance is a widely debated topic. Generally speaking, it is postulated that higher levels of economic freedom can lead to better environmental outcomes through mechanisms such as technological innovation and resource efficiency.

However, this relationship is not uniform, and the interaction between the variables analyzed varies according to the degree of economic development, the institutional characteristics of each country, etc. Nevertheless, and according to the Danish researcher Christian Bjørnskov, societies with a high level of economic freedom present an earlier EKC inflection point, i.e., they manage to reduce the environmental footprint when the country moves at lower income levels than countries where economic

freedom is lower, which favors an earlier transition towards less polluting productive models. ¹⁰

Countries with high levels of economic freedom tend to be more efficient in the use of resources and faster in the adoption of clean technologies. This phenomenon is partly explained by greater competition and lower regulatory barriers that promote innovation and investment in green technologies. Previous studies have shown that societies with freer markets show greater adoption of technologies that reduce CO2 and other greenhouse gas emissions.

For example, according to Rafiou Raphaël Bétila's estimates, economic freedom has a significant negative effect on carbon emissions, both directly and indirectly through renewable energy consumption. Specifically, his research finds that a 1 percent increase in economic freedom levels reduces carbon emissions by about 0.29 percent. In fact, renewable energy consumption contributes between 24.5 and 34 percent of this total effect. Their findings suggest that promoting economic freedom can incentivize sustainable investments in renewable energy, thereby reducing carbon emissions.¹¹

Economic freedom fosters innovation and entrepreneurship, resulting in the development and commercialization of more efficient technologies. Bjørnskov's previous research has shown that countries with higher levels of economic freedom not only innovate more, but also direct their innovative efforts towards emissions reduction and environmental sustainability. This innovative drive is crucial to ensure the transition to a low-emission economy.

The quality of institutions and the regulatory environment also play an important role in the relationship between economic freedom and environmental performance. A sound legal security system and efficient regulation are essential to ensure that economic activities do not degrade the environment. Bjørnskov notes in this regard that the quality of the legal and regulatory framework contributes significantly to reaching the earliest tipping points in the EKC, which occurs precisely in countries with high levels of economic freedom. In this sense, strong institutions and good governance allow the benefits of growth to be translated more quickly into effective environmental improvements.

Although most studies focus on CO2 emissions, it is important to consider the evolution of other greenhouse gases as well. Empirical results show that the EKC for total greenhouse gas emissions has an earlier turning point in economically free societies. This indicates that not only CO2, but also other greenhouse gases, decrease with lower income levels in contexts of economic freedom. Indeed, aggregating total emissions of the various greenhouse gases, Bjørnskov (2024) estimates that the EKC tipping point is reached at a per capita income close to \$80,000. However, for economies in the top 10 percent of countries with the greatest economic freedom, this threshold is reached at a per capita income four times better, at \$25,000.

¹⁰ Christian Bjørnskov, "Economic freedom and the greenhouse gas Kuznets curve." *European Journal of Political Economy*, 82, 102530, 2024.

¹¹ Rafiou Raphaël Bétila, "Economic freedom and carbon emissions across the globe: the mediating effect of renewable energy consumption", *Environmental Science and Pollution Research*, 30, 86300-86327, 2023.

Sustained economic performance is another clear benefit of economic freedom. Countries that have adopted free market policies have more dynamic and vibrant economies, allowing them to invest in infrastructure and programs aimed at mitigating and adapting to climate processes. This link between economic performance and sustainability is crucial to understanding how economic freedom can lead to better long-term environmental outcomes. By fostering an environment in which businesses can operate freely and compete, it incentivizes the search for more efficient and less polluting solutions.

The empirical evidence suggests that countries with high levels of economic freedom have been more effective in reducing their emissions and improving their environmental performance. These findings are important for policy making, as they indicate that promoting economic freedom can be a viable strategy for achieving environmental and sustainability goals. Moreover, the data show that countries with greater economic freedom not only achieve significant reductions in emissions, but also do so at a faster rate than those with lower levels of economic freedom.

In summary, economic freedom has a significant impact on environmental performance and the reduction of greenhouse gas emissions. Through innovation, efficiency and institutional quality, countries with freer markets tend to achieve environmental benefits earlier and more effectively. These findings underscore the importance of encouraging policies that promote economic freedom as a tool for achieving environmental sustainability.

The cost of climate change

Alarmism regarding the consequences of climate change on economic development should also be highlighted. As indicated in the previous pages, degrowth is not a viable option, since precisely what countries need to make progress in the fight against climate change are more markets and growth.

Uncertainty about the cost of climate change is considerable due to the complexity and variability of the factors involved. The DICE (Dynamic Integrated model of Climate and the Economy) models developed by William Nordhaus attempt to capture this uncertainty by integrating economic and climate data to project future impacts¹². However, damage estimates at different levels of global warming are highly sensitive to initial assumptions and the accuracy of available data. This lack of certainty is compounded by the difficulty of forecasting climate tipping points and nonlinear effects that may have disproportionate consequences.

Given this level of uncertainty, the use of discount rates becomes essential when evaluating climate policies. Discount rates allow us to compare future costs and benefits

 $^{^{12}}$ William Nordhaus, The climate casino: Why not taking action on climate change carries risk and generates uncertainty, 2019, Deusto Editions.

in present terms, providing a basis for making rational economic decisions in the face of uncertain events. The choice of the appropriate discount rate is crucial, as it reflects how we value future welfare compared to the present. A higher discount rate reduces the present value of future benefits, which may justify lower current investments in climate change mitigation.

The implications of choosing a higher or lower discount rate are significant. A high rate may discourage investments in mitigation policies, on the premise that future benefits are less valuable. This could lead to higher risks of severe long-term climate impacts. On the other hand, a low discount rate increases the present value of future benefits, encouraging greater investment in mitigation now to avoid higher costs in the future. This choice reflects a more precautionary stance in the face of climate uncertainty.

William Nordhaus argues for using a discount rate of about 4%, based on economic analyses that balance costs and benefits over time. This rate is considered appropriate because it does not excessively devalue future benefits, thus allowing for a reasonable investment in mitigation that can prevent catastrophic climate damages without imposing unsustainable economic burdens in the present.

Under the Nordhaus model, the costs of climate change are considered manageable compared to the more alarmist predictions. According to his projections, the cost of reducing emissions to meet international climate targets would range between 1% and 2% of annual global GDP. This is because the DICE model integrates economic and climate effects in a way that allows for a balanced analysis of mitigation policies. With appropriate policies and a reasonable discount rate, it is possible to limit the negative economic impacts of climate change without incurring prohibitively high costs.

In short, according to Nordhaus, there are no silver bullets that will help us reduce the consequences of climate change all at once. What we need to do is to take advantage of the opportunities offered by the innovations present throughout the world and in all sectors. That is why the proposals that countries like Spain need are those that promote greater freedom for entrepreneurship and innovation, not more restrictions and taxes.

That is, an effective climate policy must carefully balance costs and benefits, taking into account available technological and economic adaptation and mitigation capacities. A pragmatic and evidence-based approach should be advocated that considers both the risks of climate change and society's adaptation and mitigation capacities, avoiding hasty and costly measures that may not provide the expected benefits while ensuring sustainable and balanced development.

3. Supply-side policies to accelerate decarbonization. In the light of the previous sections of this paper, it seems clear that any climate change mitigation strategy must start from the premise that economic freedom is a key variable for solving both poverty and climate change. To achieve this, innovation must be accelerated through the liberalization of markets, a vector capable of consolidating

and, ultimately, cleaner production models.

Therefore, a proposal capable of promoting decarbonization in a more effective and viable manner involves advancing in deregulation, consolidating a greater opening of markets to competition. This stimulates and encourages innovation and facilitates the financing of more efficient solutions. To advance along these lines, this document

proposes supply-side economics policies based on reducing taxation with a view to

decarbonization.

freer economies that, at the same time, turn out to be richer, inducing more innovative

With more competitive investment taxation, capital flows will increase and the costs of undertaking new investments will be lower. Such an approach helps to accelerate the development and implementation of more efficient and cleaner technologies, thus replacing the old, more polluting formulas.

In line with the above, a country like Spain can commit to simplifying market operations through two key measures:

- The first is to eliminate clientelism and conventional climate policies (special tax credits, carbon taxes, tariffs and trade barriers, monopolistic markets, state-owned enterprises, etc.). It is therefore a matter of leaving behind incentives that can negatively influence the process of achieving more efficient production.
- The second is to implement free market policies (free trade, competitive energy markets without distorting subsidies, clear definition of economic and property rights, properly designed regulatory framework, low taxes, safeguarding of land and resources subject to special protection due to their high natural value, etc.). The purpose, then, is to promote positive incentives that encourage market dynamics capable of generating more efficient production.

These liberalization measures have the potential to promote foreign investment and economic growth, while supporting decarbonization and technological innovation. To put such a prescription into practice, two specific reforms are recommended: the introduction of decarbonization acceleration funds (DDFs) and the introduction of decarbonization tax rebates (DTRs). ¹³

Decarbonization Acceleration Funds (ADF)

Debt clean tax cuts (debt clean tax cuts or debt CTCs) are financial instruments designed to incentivize investments in property, plant and equipment (PP&E) and conservation projects by exempting taxes on interest income. These funds allow companies to issue tax-free private debt, which reduces the interest rates associated with these transactions and makes it more economical to deploy new investments.

For example, in Spain, these funds could be used to finance the installation of renewable energy infrastructure. A Spanish company engaged in wind energy production could issue tax-free bonds to finance the operation of new wind farms or photovoltaic plants. These bonds would attract investors due to the tax exemption applicable to the profits obtained with these operations, reducing financing costs for companies. This modernization would make it possible to increase the efficiency of the facilities, increasing the production of clean energy and thereby reducing CO2 emissions.

Decarbonization acceleration funds are specifically designed to boost the development and adoption of clean technologies, thereby accelerating the transition to a low-carbon economy. In the following paragraphs, we discuss how they operate, the potential benefits they could generate in specific contexts, and the evidence available on the application of similar schemes in other countries.

Decarbonization acceleration funds are, above all, an innovative solution that aims to mobilize private capital and channel it into clean technology projects. This objective is consolidated through tax-exempt private debt instruments: bonds, loans, savings

¹³ Both proposals are inspired by the Climate and Freedom Agreement (CFA), where solutions of this kind are described. The FAD proposal was originally described as *CoVictory Bonds*, *Loans & Savings Funds* (*CoVictory Funds*) and, in later versions, came to be identified as *debt CTC* (CTC is an acronym for *clean tax cuts*). The RFD proposal was originally called Clean Tax Cuts and, in subsequent revisions, *equity CTC*.

accounts.... These vehicles aim to reduce the cost of capital for those investments developed in connection with the acquisition or improvement of property, plant and equipment. The idea is to make such investments more attractive to investors by eliminating taxes on interest. ¹⁴

One of the main advantages of the *decarbonization acceleration funds* lies in their technology neutrality. Unlike traditional policies, which favor the implementation of some technologies over others through specific subsidies, the proposed vehicles do not discriminate between one type of technology and another. This allows market forces to determine which are the most efficient and effective solutions, avoiding distortions and promoting greater innovation. By not being tied to specific technologies, the *decarbonization accelerator funds* can be adapted to a wide range of projects, ranging from renewable energy installations to advanced techniques designed for manufacturing and industry.

Decarbonization acceleration funds offer several advantages over traditional carbon pricing and subsidy methods. By reducing the costs of raising capital, they increase the ability to leverage finance and raise the profitability of investments, making projects more financially viable. This dual advantage attracts more investment in the debt and capital markets, promoting a more dynamic and efficient financial market. In addition, their flexible design allows their application in different countries, for different purposes, so that they can also help other objectives, such as combating stagflation or financing the reconstruction of areas devastated by conflict or natural disasters.

These funds are designed to be highly democratic and inclusive, providing easy access to investment incentives to both large and small investors. Such inclusiveness contrasts sharply with the complex tax credits typically applied, which often favor large corporations to the exclusion of smaller operators. By democratizing such scenarios, decarbonization accelerator funds help enable SMEs and small investors to actively participate in the transition to a low-carbon economy.

A practical example of how an SME could benefit from decarbonization acceleration funds would be a company dedicated to the installation of solar panels in rural areas. Thanks to the incentives provided by these funds, the SME would be able to access a lower interest loan for the acquisition of new state-of-the-art equipment, since the company offering these bonds would not pay taxes on the accrued interest.

In addition, through a *decarbonization acceleration fund* scheme, the company would obtain a tax exemption on the interest on the loan, which would directly reduce the cost of its investment. As a result, the SME would be able to expand its operations and

¹⁴ This approach can have global reach if agreements are designed for international reciprocity. This would allow capital raised in any country participating in such a climate pact to be invested without borders in projects developed in another country, thus fostering a framework for global collaboration on climate issues. Such cooperation is a crucial aspect of scaling up the impact of such a vehicle. The international reciprocity and simplicity of these funds make them particularly effective in fostering agreements between countries. By facilitating mutual recognition of tax exemptions, countries participating in such an agreement reduce the risk of regulatory or tax discrepancies that could hinder the free flow of cross-border investments that can facilitate efficiency and thus decarbonization. This integrated approach ensures that projects can be efficiently financed and deployed on a global scale, accelerating the transition to cleaner energy and technologies worldwide.

increase its installed capacity, enabling more rural communities to access clean energy and thereby reducing its carbon footprint.

Decarbonization accelerator funds would benefit both small and medium-sized companies and small investors, facilitating their participation in the processes of transition or evolution to a low-carbon economy. SMEs would benefit from access to financing and tax breaks, while small investors would be able to earn higher returns. Taken together, these incentives would promote greater inclusion and democratization of investments in clean and sustainable technologies.

Decarbonization accelerator funds are also notable for their ability to promote both economic freedom and environmental sustainability. By aligning economic incentives with climate objectives, they create an environment in which investments in clean technologies are not only financially viable, but can also generate better environmental outcomes. This ensures that the transition to a less carbon-intensive economy can be both economically and environmentally sustainable, promoting global prosperity and sustainability.

<u>Parallel reforms: full and immediate depreciation and reinvestment tax</u> exemption

Decarbonization acceleration funds have a similar objective to other policies applied in countries such as the United States and known as "full expensing" rules. Such programs have proven to be effective in stimulating investment and promoting a more competitive economy that, in addition to exhibiting more growth, is less energy intensive. The difference is that the full expensing model is a deduction for business investment, while the decarbonization accelerator funds focus on raising funds to finance business investment.

Such full and immediate depreciation policy allows businesses to deduct the full cost of their capital asset investments in the same year in which such investments are made, rather than spreading the application of the deduction over several years. This framework, implemented as part of the Tax Cuts and Jobs Act (TCJA) brought forward by the United States in 2017, seeks to incentivize business investment and stimulate economic growth by freeing up capital for rapid and continuous reinvestments.

Full and immediate depreciation significantly reduces the cost associated with new business investments, which encourages equipment modernization and the adoption of more efficient technologies. Although not specifically designed for decarbonization, equipment modernization generally includes the acquisition of cleaner technologies, thus contributing to an indirect reduction in carbon emissions. ¹⁵

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¹⁵ Kyle Pomerleau, "Why Full Expensing Encourages More Investment than A Corporate Rate Cut," Tax Foundation, 2017. See: https://taxfoundation.org/blog/full-expensing-corporate-rate-investment. See also: Andrew Moylan and Andrew Wilford, "What's the Deal with Full Expensing?", National

The full and immediate depreciation introduced by the TCJA reform in the United States has had a positive and significant impact, according to the available evidence. More specifically, the literature suggests that firms that benefited from this full deduction increased their investment levels considerably in the years following the implementation of the law. In particular, a study collected by the National Bureau of Economic Research finds that firms increased their investment by 20 percent, compared to what would have occurred under a business-as-usual scenario. ¹⁶

In fact, according to the U.S. Joint Committee on Taxation, the non-partisan congressional body that assists the House of Representatives and the Senate on tax legislation and regulations, has pointed out that this policy especially benefits those who rely on fixed-asset investments, so that sectors that require low-emission technology and machinery can reduce their tax burden significantly if they invest in this type of investment. This is precisely what has helped to boost productivity and production capacity in key sectors such as industry and technology. In short, full expensing has improved the fiscal competitiveness of the United States and, at the same time, has generated a significant initial economic stimulus, although the evaluation of its long-term effects continues to be the subject of research.¹⁷

The United Kingdom has also implemented *full and immediate depreciation* to encourage business investment in the country. From April 1, 2023, companies subject to corporation tax in the UK can deduct 100 percent of their expenditure on plant and machinery in the same tax year in which they acquire such productive assets. This significantly reduces the effective tax cost of investment, encouraging a continuous investment cycle that renews and improves the capital endowment of the economy. This initially temporary policy has become a permanent measure that can help to further stimulate the economy in challenging economic conditions, such as the current one.

On the other hand, the current corporate income tax model in countries such as Estonia also serves as an innovative example of the type of formulas that can help promote investment through the introduction of tax incentives. In the Baltic country, corporate profits are not taxed until they are distributed to shareholders, either in the form of dividends or through a share buyback. This simple and transparent system has significantly reduced compliance costs and improved tax collection

Taxpayers Union Foundation, 2017. Available at: https://www.ntu.org/foundation/detail/whats-the-deal-with-full-expensing.

¹⁶ Gabriel Chodorow-Reich, Matthew Smith, Owen M. Zidar, and Erick Zwick, "Tax Policy and investment in a Global Economy," *National Bureau of Economic Research*, Working Paper No. 32180, 2024.

¹⁷ Joint Committee on Taxation, "Macroeconomic Analysis of the Tax Cuts and Jobs Act as Passed by the House of Representatives on November 16, 2017," 2018. Disponible en: https://www.jct.gov/getattachment/ec60f967-5eac-44d3-95f3-642ebf8b160c/x-66-17-5050.pdf

efficiency. It has also contributed to a very dynamic economic environment by encouraging reinvestment and thus facilitating the growth of more efficient and innovative companies. This *reinvestment tax exemption* has made Estonia a European leader in terms of *startups* per capita and capital invested per inhabitant. ¹⁸

To encourage investment in research and development (R&D) and improve business efficiency, Spain could benefit greatly from the implementation of such a policy. A *full and immediate depreciation* model would help companies deduct the full cost of their capital asset investments in the same year in which they are made, rather than being forced to spread such tax breaks over several years. This would significantly reduce the cost of capital, incentivizing companies to invest in new technologies and more efficient equipment, which in turn would increase competitiveness and ultimately reduce the environmental footprint. A virtuous circle.

It should be noted that the decarbonization acceleration funds, the full and immediate deduction and the reinvestment tax exemption are complementary measures. While the full and immediate deduction allows companies to deduct the full cost of their investments in the same year, incentivizing the adoption of efficient technologies, the decarbonization acceleration funds provide attractive financing to implement new clean technology projects. Adding both of these improvements to the reinvestment tax exemption, the cost of capital is reduced and investments become more financially sustainable, facilitating a more dynamic and efficient economy.

In addition, the creation of *decarbonization acceleration funds* in Spain would allow more direct progress in reducing the energy intensity of our production model. Tax-free private debt instruments would provide an additional source of accessible and attractive financing for clean technology projects. These funds would reduce financial costs by eliminating taxes on interest, thus facilitating the mobilization of both domestic and international capital for investments in property, plant and equipment.

It is worth mentioning that investment vehicles in Spain, such as investment funds and investment companies, are taxed at 1 percent of corporate income tax, although the share of profits is taxed under personal income tax as it is included in the savings tax base, with a marginal tax rate of 28 percent for income over 300,000 euros. With these funds, the proposal is that investment made with the clear objective of decarbonizing the economy will be tax-free.

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¹⁸ William McBride, Garret Watson, and Erica York, "Taxing Distributed Profits Makes Business Taxation Simple and Efficient," Tax Foundation, 2023. Seehttps://taxfoundation.org/blog/distributed-profits-tax-us-businesses/.

By combining the decarbonization acceleration fund policy with full and immediate deduction of investments and tax exemption for reinvestment, Spain would become a leading country in terms of offering tax incentives for the activation and deployment of business investment, resulting in more growth and employment, but also in more innovation and productive and technological efficiency, with all that this implies for the environment.

Decarbonization Tax Rebates (RFD)

The *decarbonization acceleration funds* should be complemented with measures that provide incentives to improve the internal operations of companies linked to sectors with a higher carbon footprint. While the tax exemption proposed in the previous section facilitates fundraising and provides a direct benefit for investment, another way to favor the fiscal treatment of decarbonization is to structurally cut the tax bill that private operators suffer year after year.

The implementation of *decarbonization tax rebates* in Spain is a key strategy to encourage companies to invest in clean technologies and reduce their greenhouse gas emissions. This policy proposes reductions in corporate income tax for investments that are geared towards greater sustainability and energy efficiency, so it can play a crucial role in the transition to a lower carbon economy. *Decarbonization tax breaks* not only ease the tax burden on companies, but also stimulate innovation and the development of cleaner technologies. ¹⁹

First, decarbonization tax breaks allow companies to allocate more resources to research and development efforts that can drive more efficient solutions and technologies. By reducing the tax burden on profits reinvested in green projects, companies have a direct incentive to seek and adopt solutions that reduce their carbon footprint. This approach creates a favorable environment for innovation, so that companies are motivated to develop more efficient and sustainable solutions, aligning their economic and environmental objectives.

In addition, and secondly, this policy can correct market distortions created by the generalization of subsidy and aid policies that are costly and often prove to be ineffective. In Spain, the intensive subsidies injected into renewable energy generated investment bubbles and ended up sowing distrust among investors. In contrast, decarbonization tax rebates offer a more balanced and sustainable approach that avoids the negative consequences of more traditional subsidy programs. By providing tax incentives based on investment efficiency, they promote more robust economic growth that is less dependent on state aid.

Decarbonization tax rebates also encourage fairer competition among companies, avoiding the selection of winners and losers that often accompanies direct subsidy award processes. By linking tax reductions to emission reduction efficiency, all companies,

¹⁹ Again, an international climate agreement could include this type of policy by creating a reciprocity framework that applies the same type of tax rebate in both markets. This would facilitate decision-making without distortions linked to the different tax rules of each country.

regardless of size, have the opportunity to compete fairly for these tax benefits. This not only improves competitiveness in the marketplace, but also drives the adoption of more advanced and efficient technologies, as the most effective solutions are developed and scaled quickly.

In addition, these tax cuts can attract international investment, a vital aspect in mobilizing the resources needed to move towards a more efficient economy. Such a development would position Spain as an attractive destination for global investment, in general, and the deployment of efficient technologies, in particular.

On the other hand, tax reductions encourage an economically and environmentally beneficial transition to a sustainable growth model. By aligning economic incentives with environmental objectives, companies are motivated to reduce their emissions not only for regulatory compliance, but also for the direct financial benefits. This creates an environment in which economic growth and environmental sustainability complement each other, ensuring lasting prosperity and a cleaner environment for future generations.

Therefore, the implementation of *tax rebates for decarbonization* in the Spanish tax code and, more specifically, in the corporate income tax, is fully justified as a strategic measure to encourage the transition to a sustainable economy. By offering tax rebates to those companies that move in this direction, a direct incentive is created for the reduction of greenhouse gas emissions and it is ensured that developments are born out of companies and private operations. This policy not only eases the tax burden on the companies most committed to efficiency, but also promotes innovation and the adoption of advanced solutions that enable progress towards greater decarbonization.

To outline such a policy, we must focus on the sectors that concentrate greenhouse gas emissions. At the global level, benchmark indicators estimate that such production is particularly concentrated in construction and manufacturing, transport and mobility, energy and electricity, industry and agriculture.

In Spain, for example, the 2022 emissions account yields a total of 304.4 million tons of greenhouse gases. Of this figure, 85% is explained by the activity of the sectors indicated above, as we can see in Figure 7. Therefore, although improving overall production efficiency contributes to improving environmental indicators, it seems sensible to start with these branches of activity which, in a more concentrated way, account for the bulk of emissions. If targets are achieved in this area, the results for production as a whole will be much greater - and the cost-benefit of such a program will be higher.

Construction
Agriculture
Industry
Transportation
Others

Figure 7. Distribution of greenhouse gas emissions by sector in Spain, 2022.

Source: INE.

The formula for applying the *tax rebates for decarbonization* in the Spanish corporate income tax would consist of a total rebate of the quota for the amount of the investment made in technologies and processes that reduce greenhouse gas emissions, with a ceiling so that the effective rate can be reduced by a maximum of 5 percentage points. In addition, if in a given fiscal year the companies do not have sufficient quota, they may apply the deductions against the quota of future fiscal years, provided that they can prove the reduction of their emissions.

Let us suppose that a company has a pre-tax profit (taxable income) of 1,000,000 euros. With the general applicable tax rate of 25 percent, the corporate income tax liability would be 250,000 euros ($1,000,000 \times 0.25$). Well, let us now assume that the company has made an investment in machinery in this same year that will reduce the environmental impact in its production chain. The cost of such a deployment amounts to 50,000 euros. Thus, with the rebate applied, the final tax payable would be 200,000 euros, which would result in an effective corporate income tax rate of 20 percent, i.e., five percentage points. Since this rebate could be applied without limit in time, if the company had a zero tax liability in this year, it could deduct the 50,000 euros in all future years, provided that the reduction in emissions is maintained.

The reason for applying this measure through a total rebate of the quota, instead of a direct reduction of the tax rate, lies in the additional incentive it provides to companies. By allowing investments in efficient technologies to directly reduce the tax burden, companies are motivated to be more ambitious in their sustainability plans. This approach not only promotes the adoption of more sustainable practices, but also ensures that tax benefits are directly linked to concrete emission reduction actions, thus aligning economic and environmental objectives more effectively.

The bonus would apply to any type of investment aimed at reducing environmental impact. Whether in renewable energies, energy efficiency, carbon capture and storage technologies, or improvements in production processes to reduce emissions. All investments that contribute to environmental sustainability would be eligible for this tax deduction.

The objective is for this measure to be neutral and technologically inclusive, thus avoiding the creation of market *bubbles* such as those that developed in Spain at the beginning of the century, with the policy of premiums and subsidies for renewable energies. In contrast, the proposed model allows for a more balanced, diversified and decentralized solution, ensuring that the market is not distorted and that emission reductions are effectively and sustainably driven.

Another issue to be taken into account is the cost of such a policy in terms of revenue. In this respect, and first of all, it should be noted that income from corporate income tax in the last year for which data are available (2023) amounted to 35,000 million euros. On the other hand, for that year, the existing tax rebates had an impact of 292 million euros. Well, the *tax rebates for decarbonization* would be of a higher amount.

For example, the net share represented by the agriculture, extractive industry, energy and water, manufacturing, construction and trade sectors represents about 86% of the total. In other words, these sectors contribute 30 billion euros. A realistic target implies making investments that reduce their average rate by around 5 percentage points, which would result in a total liquid quota of 24 billion euros. In other words, the collection cost of this measure would be 6 billion euros, a figure that coincides with the payment of premiums for renewables, for example.

It is worth noting that, with an improvement in the efficiency of public spending, Spain could save up to 60 billion euros, so that the financing of *tax rebates for decarbonization* seems affordable. ²⁰ Thus, this implies that the cost of implementing such a policy would be just 10 percent of the potential savings from improving efficiency levels in the public sector. Moreover, it is important to consider that part of the lower direct revenue would be partially offset by the behavioral effect seen in the economy. By promoting supply-side policies, an overall increase in economic activity is expected, which in turn increases government revenues.

It should not be forgotten, moreover, that Spain granted in 2018-2019 (before the energy crisis) a figure close to €20 billion in aid to the energy sector. Therefore, any optimization of these expenditures can directly contribute to financing the adoption of tax rebates to decarbonization.

Other additional measures

²⁰ Instituto de Estudios Económicos, "Por una mejora de la eficiencia del gasto público en España", *Revista del IEE* No 1/2022.

In addition to the *decarbonization acceleration funds* and *tax rebates for decarbonization*, there are other measures included in the proposed CFA (Climate & Freedom Accord) that can help Spain on the road to higher environmental performance promoted through economic freedom and innovation. Among the principles listed are competition and demonopolization policies, special incentives for disruptive innovations or deductions for philanthropic actions aimed at better conservation of natural areas.

Competition and de-monopolization policies are a crucial strategy for improving market dynamism in key sectors, such as energy and utilities. In Spain, many branches of activity are still dominated by large companies operating in an environment of little competition, which limits innovation and efficiency. 21

By offering a general or total exemption from capital gains taxes to investors and companies that sell monopolistic or oligopolistic assets to promote a more competitive market environment, a strong incentive would be created to help dismantle such structures. This measure not only promotes a less rigid and more competitive market, but also attracts activist investors seeking to restructure and improve the efficiency of the sector, with all that this entails in terms of innovation and the environment.

In the Spanish context, this policy could be applied to both private companies and public-private partnerships, reducing state interference in production processes and fostering a freer and more dynamic market in those areas where competitiveness is lower. Introducing a two-year time window for these tax exemptions could ensure that companies act quickly, avoiding prolonged monopolistic control situations. This would create a more attractive environment for the emergence of new companies capable of betting on new technologies, facilitating the consolidation of clean and sustainable innovations.

De-monopolization would help diversify the energy and utilities market, enabling greater adoption of green technologies and sustainable practices. With greater competition, companies would have more incentive to improve their efficiency and, along the way, reduce their emissions. This, in turn, would benefit consumers with lower prices and higher quality of service, while promoting a more robust and, through such development, more environmentally friendly economy.

The CFA also talks about incentives for disruptive innovations, or *game changers*, a powerful tool to stimulate revolutionary advances in the implementation of clean technologies. This solution involves providing substantial tax exemptions to those companies that achieve transformative innovations, such as projects that seek to promote zero-emission fuels and, by extension, engines that run on this type of fuel. Another example would be the production of concrete with zero-emission impact. In Spain, this policy could encourage companies to invest significantly in research and development, knowing that the profits generated by these innovative technologies will be tax-free for the first ten to fifteen years of operation.

²¹ It is worth noting that Spain has gone from 27th place in the Fraser Institute's Index of Economic Freedom at the beginning of the 21st century to 40th place, with a notable worsening of its score. In the category of business regulation, it barely scored 6 points on a scale of 0 to 10.

This unprecedented exemption would reduce financial barriers to innovation and ensure that successful technologies can be rapidly scaled to meet global demand. Moreover, if applied in all participating countries of a major international agreement, it would expand the potential market for these technologies, thereby attracting private capital and accelerating the development of sustainable and competitive solutions. Acting along these lines could position Spain as a leader in green technological innovation, attracting investment and global talent.

Moreover, incentives for disruptive innovations avoid the problems of traditional subsidies, which often pick winners and losers and create distortions in the market. In contrast to that paradigm, incentives for disruptive innovations provide a broad benefit that rewards the activity of any company capable of making significant advances. This fosters a competitive environment in which the best technologies can emerge on the basis of merit and efficiency, promoting a faster and more efficient transition to a low-carbon economy. A possible definition of disruptive innovation could be one that achieves at least a 50% reduction in emissions from a pre-existing technology for a particular sector or industry.

Finally, a charitable deduction model close to the U.S. paradigm may encourage philanthropy in the area of conservation and wilderness preservation. Such an approach would make it easier for individuals and companies to donate to non-profit organizations and projects that focus on such work. In fact, a global agreement that generalizes such tax treatment for environmental philanthropy could encourage this type of development regardless of the country of operation, thus mobilizing additional resources.

By providing these incentives to support charitable donations, it contributes to the reduction of taxation borne by the private sector, facilitating investments in the field of wilderness conservation. At the international level, a standardized register of associations and organizations could help to build a global framework, in line with the nature of the objectives set.

These grants complement baseline sustainability efforts by mobilizing more private resources focused on critical projects. Engaging the private sector in this way can significantly enhance the impact of such initiatives. By facilitating the flow of funds to environmental efficiency projects, Spain can further accelerate its climate goals.

4. Conclusions This paper shows that economic freedom is a crucial factor in consolidating more efficient production models. There is much talk of decarbonization as a goal, but if the aim is to move towards an economy with lower emissions of carbon dioxide and other greenhouse gases, it seems logical to review the available evidence in this regard. Once we do this exercise, we can see that countries with higher levels of economic freedom tend to have better environmental performance, based on incentives that promote more efficient and innovative production. Safeguarding private property, competition in markets and efficiency in the use of resources are characteristic factors of liberalized economies that facilitate the deployment and adoption of cleaner technologies and more sustainable practices. This shows that a context of economic freedom is not only compatible with climate objectives, but also facilitates their achievement.

For this reason, this document suggests the implementation of a series of measures designed to significantly accelerate decarbonization and, at the same time, expand

economic freedom. The main tools suggested are the following:

- As a first step, the creation of decarbonization acceleration funds (FAD) is proposed. These financial instruments are designed to incentivize investment in property, plant or equipment. Companies contributing capital to these funds would not pay taxes on the income or interest generated, which would reduce capital costs and lower the cost of new business investments. The renewal of capital makes it possible to generalize new, more efficient, cleaner and innovative solutions, accelerating economic activity and reducing the energy intensity of production.
- As complementary reforms to the FADs, rules could be implemented to allow full and immediate depreciation of business investments or changes in the Corporate Income Tax to exempt reinvested business profits.
- In addition, tax rebates for decarbonization are proposed, focusing on the sectors that account for 85% of greenhouse gas emissions: construction, manufacturing, transportation, energy and electricity, industry and agriculture. It is suggested that investments in technologies or equipment that reduce production emissions be fully subsidized, allowing savings equivalent to five percentage points of the general corporate income tax rate. The fiscal cost of this measure would be around 6,000 million, being manageable from a budgetary point of view.
- Other tax proposals that could facilitate decarbonization include: (1) letting profits earned by companies that develop disruptive technologies that aggressively reduce greenhouse gas emissions tax-free, with a 50% drop relative to pre-existing technologies and an exemption limited to a ten-year period; (2) introduce tax breaks for environmental philanthropy, in line with U.S. rules that incentivize private financing of conservation projects; and (3) allow tax-free sales of stakes in companies in sectors that account for 85% of greenhouse gas emissions, to facilitate greater investment and competition in these areas.

These improvements are not only useful for a national climate strategy, but also serve as a model to be followed at European and global level. The implementation of these tax reductions can serve as a starting point for a more effective and dynamic climate agreement, based on generalizing greater economic freedom and, with it, a more efficient, innovative and cleaner productive framework. Spain's leadership in this field can serve as an example for other countries seeking to balance economic growth with environmental sustainability. The adoption of similar solutions in different regions of the world can accelerate the transition to a less carbon-intensive economy, reducing global greenhouse gas emissions more rapidly. By positioning itself as a leader in the field of free-market environmentalism, Spain can positively influence the development of sustainability policies globally.

The combination of economic freedom, innovation and sustainability is key to meeting the environmental challenges of the 21st century and promoting more efficient and environmentally friendly economic growth.

$\label{lem:conomic freedom and environmental performance in the OECD, 2021.$

Country	EF	Position EF	EPI	EPI position
Switzerland	8,5	1	65,9	8
New Zealand	8,4	2	56,7	23
United States	8,1	3	51,1	28
Ireland	8,1	4	57,4	21
Denmark	8,1	5	77,9	1
Australia	8,1	6	60,1	15
United Kingdom	8,0	7	77,7	2
Canada	8,0	8	50,0	31
Estonia	8,0	9	61,4	13
Lithuania	8,0	10	55,9	26
Iceland	7,9	11	62,8	9
Luxembourg	7,9	12	72,3	5
Finland	7,8	13	76,5	3
Sweden	7,8	14	72,7	4
Czech Republic	7,8	15	59,9	17
Japan	7,8	16	57,2	22
Netherlands	7,8	17	62,6	10
Costa Rica	7,8	18	46,3	35
Germany	7,7	19	62,4	12

Latvia	7,7	20	61,1	14
Austria	7,7	21	66,5	7
Norway	7,7	22	59,3	18
Chile	7,7	23	46,7	34
Israel	7,6	24	48,2	32
Portugal	7,5	25	50,4	30
Spain	7,5	26	56,6	24
Slovakia	7,5	27	60,0	16
Korea	7,5	28	46,9	33
Belgium	7,4	29	58,2	19
France	7,4	30	62,5	11
Hungary	7,4	31	55,1	27
Italy	7,3	32	57,7	20
Slovenia	7,2	33	67,3	6
Poland	7,1	34	50,6	29
Mexico	7,0	35	45,5	36
Greece	6,9	36	56,2	25
Colombia	6,6	37	42,4	37
Turkey	6,3	38	26,3	38

Source: own elaboration based on Fraser Institute and Yale.