Célia Maria Silva Carvalho* and Vera de Hesselle*

Tax and Environment in Brazil and Germany

Summary

The relationship between the green deal and green taxes is evident. The study focuses on the countries Brazil and Germany. In both countries, environmental protection and the protection of livelihoods is enshrined in the constitution as a state task. States also commit to climate protection through international treaties.

Of particular interest are the new taxes being introduced or varied to combat climate change in many parts of the world. The so-called green taxes refer to state control of resource consumption (sanction) as well as to support of environmentally friendly behavior (incentive). For the countries of Brazil and Germany, examples of green taxes are presented within the framework of indirect and direct tax types, and ideas for further development are addressed.

Abbreviations

110 German risear Code (ribeabenordinana	AO	German	Fiscal	Code ((Abgabenordnung
--	----	--------	--------	--------	-----------------

CCL Climate Change Levy

ErbStG Inheritance and Gift Tax Act (Erbschaft- und Schenkung-

steuergesetz)

GDP Per Cap- Gross Domestic Product Per Capita

ta

GewStG German Trade Tax Act (Gewerbesteuergesetz)

GG German Basic Law (Grundgesetz)

GrStG Real Estate Tax Act (Grundsteuergesetz)

HDI Human Development Index

ICMS Tax on Goods Circulation Operations

IPI Tax on industrialized products

^{*} Prof. Dr., Professor of Budgeting, Finance and Public Policies at the Master Program in Public Law of the FGV, President of the State Finance Managers Group, President of the Ibero-American Forum on Budgetary and Fiscal Intergovernmental Coordination.

^{*} Prof. Dr. Professor of Tax Law and Business Law at City University of Applied Sciences Bremen (HSB), Vice President of Graduate & Professional School Bremen, Head of the Examination Board of Faculty of Economics.

Abbreviations

IPTU Property Land Tax ISS Tax on services

ITR Tax on Rural Property

KStG German Corporate Income Tax Act (Körperschaftsteuerge-

setz)

PIS-COFINS Social Integration Programs- Contribution to Social Securi-

ty Financing

SDG Sustainable Development Goals

UFRRJ Federal Rural University of Rio de Janeiro

UN United Nations

UNDP United Nations Development Programme

VAT Value Added Tax

Introduction

Today, there is still a mismatch between economic success and environmentally friendly behaviour, which consequently affects global warming. Although CO2 emissions are steadily decreasing in Brazil and Germany, we are still far from the desired climate neutrality. The impacts of economic development on the environment are increasingly intense, bringing with them growing risks to the environmental sustainability of economies and to life in society in general.

Environmental taxation is based on the premise that taxes represent an instrument for the protection of the environment. This is one of the mechanisms that the public authority can use to make its urban development plan effective by using tax instruments to generate the resources required to provide environmental public services (tax or revenue collection) or to guide the behaviour of taxpayers towards environmental protection (extra fiscal or regulatory). Therefore, environmental taxes may act as an eminently extra fiscal urban policy instrument.

Every effort should be made to make the issues of green taxes and public welfare visible in the field of social responsibility. In Germany, there has been a Green Party foreign minister since December 2021, who will put the climate issue in the spotlight, also in the international context. In Brazil, there will be new elections in 2022, which will also decide whether the new government, unlike the current one, will impose an enhanced climate policy for public welfare.

The paper presents some examples from Brazil and Germany on green taxes focused on sustainable development, and last but not least, the final considerations. The research results point to the similarities and differences of the mechanisms used by the two countries in favor of a sustainable environment, allowing a better understanding of their potential and limitations. If we manage to adjust Green Taxes by reviewing their scope and simplifying the forms of tax incentives aimed at protecting the environment by implementing a culture of commitment rather than punishment, we will be able to ponder on a taxation model that will serve as a basis for a universal system.

Experiences of Brazil and Germany

In the following section, we present examples of how both countries deal with environmental taxes.

Germany

Environmental taxes do not exist as an autonomous tax type in Germany but are rather present as the steering effect behind indirect taxes (consumption taxes) and taxes with environmental incentives in all direct taxes (income taxes, trade tax, corporate income tax).¹

Direct taxes

In German tax law, the German Fiscal Code (Abgabenordnung – AO)² contains basic principles for all individual tax laws. It is the most elementary law of German tax law and, since it contains substantive and procedural provisions applicable to all types of tax, it is also referred to as the "jacket law" or "basic tax law" or as an umbrella. The German fiscal code is part of general tax law and contains special regulations with environmental aspects. It includes a list of charitable activities to which the individual tax laws refer with their tax reductions. Of particular importance is § 52 of the German Fiscal Code, which comprises a circumscription and enumeration of "public-benefit purposes", i.e. sets out a general normative framework of

¹ BVerfG, of 20.4.2004, 1 BvR 1748/99, BVerfGE 110, 274 Pt. 56 et seq. on energy and electricity tax.

² Https://www.gesetze-im-internet.de/ao_1977/; English version: https://www.gesetze-im-internet.de/englisch_ao/index.html.

objects and forms of charitable behavior enabling taxpayers to benefit from tax advantages. Here, the special tax breaks are not covered by the Fiscal Code, only the definitions.

According to § 52 section 1 AO, a corporation will serve public-benefit purposes if its activity is dedicated to the altruistic advancement of the general public in material, spiritual or moral respects. Section 1 is the starting point and center of the tax law on non-profit purposes, which are listed in section 2. All corporations that wish to claim privileged status must selflessly and exclusively and directly promote the general public (§§ 55 to 57 AO) through one of the purposes listed. The "general public" is not an indeterminate legal term here, but rather a value concept that needs to be filled in and is subject to change. The Federal Fiscal Court (Bundesfinanzhof – BFH) refers in particular to the values and views of the population and the guarantees in the German constitution, especially because environmental protection is a state responsibility under Article 20a of the German Basic Law.³

According to § 52 (2) point 8 AO, the advancement of environmental protection, nature conservation, landscape conservation, coastal and flood protection is to be recognized as promotion of the public good. The advancement of environmental protection includes all measures aimed at preserving the natural foundations of life, both for humans and for animal and plant life. The natural foundations of life are all circumstances, which are not created by humans and that determine the life of every being. Landscape protection aims at preserving certain geographical areas with their natural characteristics from changes (especially due to human intervention), maintaining their ecological diversity and natural balance.⁴

On the other hand, there are also charitable activities that contradict environmental protection, for example the advancement of sport (§ 52 section 2 point 21 AO). This also applies, for example, to all kinds of motor sports, for instance with cars, motorcycles, motor boats, motor planes, etc., which are in any case harmful to humans, animals and nature. Skiing and also

³ In this context, it is not contrary to the non-profit status that the corporation also opposes the plans of government agencies in compliance with applicable legal provisions. The acceleration of the phase-out of nuclear power aimed at by the legislator within serves as a public welfare objective the protection of life and health of the population (Art. 2 section 2 sentence 1 GG) and the task imposed on the state in Art. 20a GG to protect the natural foundations of life also in responsibility for future generations, BVErfG, 06. Dezember 2016 – 1 BvR 2821/11 –, BVerfGE 143, 246-396, ECLI:DE: BVerfG:2016:rs20161206.1b-vr282111, marginal number 283.

⁴ Seer in: Tipke/Kruse, AO/FGO, 168. No 11.2021, § 52 AO, marginal number 28.

outdoor mountain biking harm the environment too; here especially the wildlife and the ecological underground is heavily damaged and therefore these sports are not environmentally friendly. As this makes apparent, the non-profit character of the promotion of sports does not require that the promoted sport is environmentally friendly or at least not harmful to the environment.⁵ In this respect, the Federal Fiscal Court (BFH) already stated in 1997 that a sport can benefit from the non-profit privileges irrespective of its assessment as, for example, accident-prone or environmentally harmful. It is the task of the legislator to resolve conflicts of objectives within the catalogue of § 52 section 2 AO, by means of restrictions on the beneficiary purposes or by means of regulations in police, environmental and regulatory law.⁶

Non-profit activities are divided into three areas, the charitable administration, the asset management and the economic business operation. Taxpayers can operate in parallel in the three areas just mentioned. In this case, the non-profit institution may be exempt from corporate income tax and trade tax for some areas (charitable administration and asset management) but not for others (business operations). This system allows both smaller, non profitable and large, financially successful and more profitable associations to be treated according to the same rules. Thus, only the income from charitable activity remains subject to tax-exemption, and reduced sales tax rate but not any income or any turnover of a non-profit institution at all.⁷ While the definition of non-profit status, as just stated, is a part of the fiscal code, the tax benefits are part of the individual tax laws, especially in the case of non-profit associations the Corporate Income Tax Act and the Trade Tax Act.

Income tax, corporate income tax and trade tax refer to the provisions of the Tax Code and establish various tax exemptions. Both the nonprofit organizations themselves and donations to nonprofit organizations are taken into account. This also includes environmental organizations. Donations in this sense are expenses incurred by the taxpayer to promote charitable, ecclesiastical and non-profit purposes in Germany and in other EU/EEA countries.

Non-profit organizations are exempt from Corporate Income Tax, § 5 section 1 number 9 Corporate Income Tax Act (Körperschaftsteuergesetz – KStG) and from trade tax according to § 3 number 6 Trade Tax Act (GewStG) as long as they do not run a commercial business operation and

⁵ BFH, 29. Oktober 1997 – I R 13/97 –, BFHE 184, 226, guidance statement 2.

⁶ BFH, 29. Oktober 1997 – I R 13/97 –, BFHE 184, 226, guidance statement 3.

⁷ Bott in: Bott/Walter, KStG, § 5 KStG, marginal number 18.

provided that the revenue including sales tax from commercial operations does not exceed 45,000 Euro [§ 64 (3) AO].

As mentioned before, there is also a reduction of the tax base by company donations made to a non-profit organization in § 9 number 5 Trade Tax Act (GewStG) and in § 9 section 1 number 2 Corporate Income Tax Act (KStG). This means that a non-charitable company can support a charitable company through donations and thereby save taxes itself. The maximum deduction is 20% of the profit from business operations or 4 per mille of the sum of total sales and wages and salaries spent in the business year.

However, the legislator would also like to give incentives for business tax subjects to make donations to tax-privileged corporations in order to relieve public budgets of the financing of activities for the common good.⁸

In addition to the tax exemption for non-profit organizations, the tax deductibility of donations made by individual citizens to such organizations are also fixed in § 10b section 1 sentence 1 Income Tax Act (EStG) within the same limits, so that donating companies regardless of their legal form and private donors are treated equally. Income tax privileges for donation to non-profit organizations amounted to 1.92 billion euro in 2022.9

The Inheritance and Gift Tax Act (ErbStG) provides for a tax exemption for gifts and acquisitions on account of death to charitable institutions under § 13 section 1 number 16b and number 17 ErbStG for an unlimited amount.

Last but not least: In the Real Estate Tax Act (GrStG) ecological criteria can be taken into account. According to § 3 section 1 number 3, § 7 Real Estate Tax Act (GrStG), real estate that is used directly to fulfill a charitable purpose according to § 52 AO is exempt from real estate tax.

Within the framework of income and corporate tax, there are various benefits, such as a faster depreciation for the use of electric cars. ¹⁰ Energy-saving renovations (e.g. thermal insulation, new heating systems, new ventilation system) of residential buildings similarly enable a reduction in the income tax.

⁸ Erdbrügger in: Wendt/Suchanek/Möllmann/Heinemann, GewStG, 1. Aufl. 2019, § 9 Nr. 5 GewStG marginal number 1.

^{9 28.} Subventionsbericht, 2019-2022 Anlage 3 number 7.

¹⁰ However, this provision is still under scrutiny of the European Commission considering the compliance of state aid guidelines. Loewens in: Brandis/Heuermann (vormals Blümich), § 7c EStG point 2.

Indirect taxes

The steering effect of tax legislation that favors environmentally friendly behavior is often present in excise duties (or consumption taxes). As a rule, it is an indirect tax that is levied on the manufacturer and is designed to be passed on to the (end) consumer (so called indirect taxes); in contrast to individual taxes, which are imposed on the generation of income, excise taxes are levied on the use of income.¹¹

Certain indirect taxes are imposed by the German federal state not only to generate revenue, but also to incentivize the protection of the environment.¹² Especially the energy, electricity, motor vehicle and aviation tax account for a large share of revenue for the federal government,¹³ while including a steering effect for the consumer.

Subsidies and other financial elements

Every two years, a subsidy report is prepared by the federal government, which aims to present and evaluate the numerous direct and indirect subsidies at the federal level. Subsidies are defined here as all direct and indirect financial support and tax concessions, including subsidies according to the EU definition. They are reviewed on a regular basis. The recent 28th Federal Subsidy Report of 18 August 2021 - published by the federal ministry of finance - covers 2019 to 2022 and contains besides tax benefits an overview of numerous grants in the area of environmental policy.¹⁴

The federal government's subsidy policy is increasingly shaped by climate and environmental policy, particularly in the area of direct funding through federal financial assistance. In 2021, 67 of the 128 grants with a total estimated financial volume of 16.2 billion euro were positively related to the environmental and to the environmental and climate protection targets set out in the German sustainability strategy. Their share of the of the total volume of financial assistance in 2021 was 66.7 percent, which equates to 38.5 percent of total subsidies (financial assistance and tax breaks). A total

¹¹ BVerfG, of 13.4.2017 – 2 BvL 6/13, BVerfGE 145, 171, Pt. 112. Not an excise tax: nuclear fuel tax. For further information please see: BVerfG, of 13.4.2017 – 2 BvL 6/13, BVerfGE 145, 171.

¹² Kirchhof, BB 2015, 278 (280): Depending on the financial burden, the steering effect may amount to a legal ban of certain actions.

^{13 58.15} bn. Euro per year (energy tax 40 bn. Euro, electricity tax 7 bn. Euro, motor vehicle tax 9,4 bn. Euro, aviation tax 1.75 bn. Euro; however energy and aviation tax were significantly lower in 2020 due to Covid impacts).

¹⁴ www.bundesfinanzministerium.de; Artikelnummer BMF40264.

of 42 grants were newly introduced. The most significant new grants are the Federal Grant for climate-efficient buildings (BEG), and grants for the purchase of commercial vehicles and buses with alternative climate-friendly drive systems.¹⁵

Brazil

Brazil has a National Tax Code - CTN created by Law nº 5.172 of October 25, 1966. This code is about the National Tax System and establishes general rules of tax law applicable to the Federal Government, States and Municipalities. Article 1 of Law nº. 5172 regulates, based on Constitutional Amendment nº. 18, of December 1, 1965, the national tax system and establishes, based on article 5, item XV, subparagraph b, of the Federal Constitution, the general rules of tax law applicable to the Federal Government, the States, the Federal District and the Municipalities without prejudice to the respective complementary, supplementary or regulatory legislation.

The configuration of taxes in the current legal system allows (i) the creation of taxes oriented to environmental purposes (residual competence of the Federal Government) in order to operate within the tax incidence guided by the environmental axiological matrix; or it may (ii) promote changes in any of the criteria of the tax incidence matrix rule (material, spatial, temporal, personal and quantitative) in order to comply with environmental aims. In both cases, it is certain that the requirements to meet the environmental purpose are fulfilled.

Similarly to Germany, Environmental taxes do not exist as a type of autonomous tax in Brazil, but are rather present as the steering effect behind indirect taxes (consumption taxes) and taxes with environmental incentives in direct taxes (personal income taxes, corporate income tax, property land tax, tax on rural property).

Direct taxes

The income tax regime in Brazil, a federal government tax, according to item III, article 153 of the Federal Constitution, still offers few practical examples of tax incentives aimed at protecting the environment. It is possible to deduct from Personal Income Tax and Corporate Income Tax amounts spent on reforestation. Income tax legislation allows companies to deduct some expenses with machines, materials or labor used in the implementation of devices that protect the environment, or that effect the

¹⁵ Federal ministry of finance, 28th Federal Subsidy Report (2021) p. 6.

implementation of protection policies. There is also a new program named the "Rota 2030 Program" –this is a federal program for the automotive chain with the objective of supporting technological development, competitiveness, innovation, vehicle safety, environmental protection, energy efficiency and the quality of automobiles. The program provides a reduction of up to 15.3% in the amount spent on research and development - R&D projects in the income tax of companies.

The other main direct tax is property land tax (IPTU). IPTU is a municipal tax levied on real state property, including all types of real estate residences, commercial and industrial buildings, land, and recreational farms. Provided for in the Federal Constitution (CF), it has an extra-fiscal characteristic, as stated in item II, § 4, article 182 of CF/88. The legal provision foresees that the non-compliance with the social function of the property leads to the possibility of progressive tax rates over time. This tax is regulated by the City Statute through Law no. 10,257 of July 10, 2001.

There is a program named Green IPTU. The objective of the green IPTU is to grant discounts in the amount of the aforementioned tax charged to taxpayers who carry out improvements in their properties aimed at the sustainable use of natural resources. The Federal Constitution authorizes extra fiscal progressivity in IPTU as long as they are edited and provided for in the Municipal Master Plan. This plan is the main instrument of Brazilian Urban Policy. The first key mechanism for granting discounts are tax payment discounts starting at 5% up to total tax exemption. Those discounts may be cumulative, variable, fixed, or non-cumulative percentages.

For example, Guarulhos City (State of SP) grants discounts from 5% to 20% to properties with green areas or that adopt sustainability practices, such as selective collection, rainwater harvesting, and green roofs and 3% discount for buildings that use sustainable materials. Those discounts are different among Cities and programs.

The second main discount mechanism is the Green Credit Certificate, a credit that can be used to reduce active debt. In this context,, the City of Belo Horizonte stands out, having recently published Municipal Law no. 11.284, of January 22, 2021, establishing the Green Credit Certification, a program whose objective is to encourage the adaptation of buildings to sustainability and resilience measures by granting a green credit certificate of active debt to these properties. The certificate can be used for the total or partial extinction of tax and non-tax credits registered in the municipality's

active debt¹⁶ (except for credits of a social security nature). The alternative sustainability measures likely to generate the discount are those related to aspects such as water, energy, climate change, mobility, permeability, or waste. Activities that will qualify for the benefit include implementation of rainwater collection, rainwater use and water reuse system; solar water heating system; implementation of a solar energy system (photovoltaic); constructions with sustainable material; system for the use of wind energy; solid residue separation, garbage treatment, etc.

The Tax on Ownership of Motor Vehicles (IPVA) is a state tax according to the Federal Constitution, Article 155. In some states, IPVA has differentiated rates according to the type of fuel used in the vehicle. Each state has its own unit rules and exemptions. Currently, electrified cars do not have large tax incentives to gain space in Brazil. But more and more states have defined discounts or exemptions in the IPVA for these vehicles as a tool to stimulate technology. The IPVA rates can be graduated according to the degree of pollution that the car produces. In the State of São Paulo, the IPVA rate for gasoline-powered cars is 4%, and the rate for gas or ethanol-powered cars is 3% (Law no. 13,296, Article 9, as at November 2021). In the state of Rio de Janeiro, the tax rate is 4% for gasoline or diesel cars, 2% for ethanol-powered cars, 1.5% for natural gas-powered cars, and 0.5% for electric cars (Law no. 2.877, Article 10, as at December 2021).

Finally, the Tax on Rural Property – ITR, a federal government tax according to item VI, Article 153 of the Federal Constitution, is a valuable instrument when it comes to preserving and protecting the environment in order to achieve sustainability. Its main function in the Federal Constitution is extra fiscal. The 1988 Federal Constitution provides for state regulation of rural property, through the possibility of using progressive tax rates according to the area of the property and the degree of use for rural properties which do not fulfill their social function (unproductive latifundia); do not have rational utilization and use natural resources inappropriately; or disrespect the environment and labor standards, etc. The exemptions from the ITR fall on areas of legal preservation, permanent preservation, private reserves of environmental preservation.

As an example of a sustainable tax, we can mention the Sustainable ITR program of UFRRJ, in the city of Três Rios, implemented in 2017, given the need to reduce costs on the University Campus, due to the reduction in the transfer of resources from the Federal Government to Federal Universities.

¹⁶ Active debt refers to a debt duly ascertained by the government that was not contested by the interested party within the legal time limit after the issuing of the assessment notice or the notice of infraction.

The objective was to raise the environmental awareness of those who attended the campus about sustainability, through the creation of an ongoing extension project that would mobilize the entire academic community with the help of previously selected students. As main measures, we highlight savings in electricity, water and paper; limitation in the use of disposable cups with the adoption of mugs; and holding recycling workshops and other awareness events. The program also involved interaction with the community, through partnerships with traders at the agroecological fair, who collected used cooking oil, and with cooperatives of recyclable material collectors. According to the program coordinator, the changes have been visible since the beginning of the project's activities: recyclable and non-recyclable materials were separated for collection by the Três Rios cooperative and the use of plastic cups on campus was completely abolished. As a result, costs went down.

Indirect taxes

In Brazil, a series of tax incentives are granted aimed at the environment in the form of indirect taxes, including especially indirect consumption taxes. The latter have their source in a variety of federal government, state and municipal tax laws with different rules and environmental incentives. For example - Tax on Operations related to the Circulation of Goods and on Provision of Interstate and Intermunicipal Transport and Communication Services – ICMS, a States and the Federal District government tax according to item II, Article 155 of the Federal Constitution. This is the main tax on consumption in Brazil, as it is levied on all transactions involving the circulation of goods.

One example of tax benefit related to the environment is the ICMS Agreement n.º 99/2018 (all Federative Units). This document authorizes the exemption of ICMS levied on internal and interstate transactions with electronic products and their components, within the scope of the reverse logistics system, regarding the return of the products after their use by the consumer. Brazil also has the Ecological ICMS, allowing for the transfer to the municipalities of a small portion of the proceeds, according to environmental preservation criteria. The ecological ICMS is actually a portion of the State's revenue distribution passed on to the municipalities that meet the legal norms of environmental protection; which have conservation units; power springs; garbage collection; environmental sanitation; preservation of local historical heritage, indigenous reserves, and so on (depending on the state).

The Tax on industrialized products, IPI, a federal government tax according to item IV, article 153 of the Federal Constitution, is a value-added tax that covers only one phase of industrialization and importation. The Brazilian Constitution defines that the IPI will be selective, depending on the essential nature of the product. (Products less harmful to the environment may have lower rates.) For example, the "Rota 2030 Program" allows the reduction of up to 2% of the IPI tax rate on energy efficient vehicles. The benefit can be extended to hybrid vehicles equipped with an engine that uses, alternatively or simultaneously, gasoline and alcohol. The benefit is an exclusive benefit for car manufacturers.

PIS-COFINS - Contribution to the Social Integration Program (PIS) and Contribution to Social Security Financing (COFINS), according to Articles 195 and 239 of the Federal Constitution, are federal contributions calculated on the invoicing and revenue of companies. In this way, it makes up the Brazilian indirect taxes on the consumption of goods and services. One of the examples of tax expenditure on the environment is Cosit Solution no. 1/21 (Federal Revenue): in an interpretation by the federal government, credits regarding expenses with effluent treatment, industrial waste and wastewater will now be allowed, as they are necessary and mandatory expenses by law.

The tax on services – ISS, formally called the Service Tax of Any Nature (ISSQN), a municipality and the Federal District tax according to item III, Article 153 of the Federal Constitution, is a tax levied on the provision of services by companies and self-employed professionals. ISS admits the possibility of granting a tax benefit below the imposition of the minimum rate of 2% prescribed in Law. The objective of benefit is boosting the civil construction sector with technological innovations and activities aimed at environmental preservation, project sector, etc. There is a list of services to obtain the benefits, which include: a) projects, works and installations for the manufacture, sale and distribution of components for solar energy systems; b) installation, operation and maintenance services for solar energy systems; and, c) new buildings and building renovations that comply with environmental criteria.

Potential Improvements

The ideal background for the introduction of environmentally related tax provisions outside of excise taxes would be a broader way of thinking about the function of taxes. If the individual took responsibility, there would be no reason to achieve a steering effect through taxes. This approach stems from the idea that each and every one of us can help to save the state from

costs if we behave in a more environmentally friendly manner. In a sense, it raises the question of compensation or a bonus for social and environmental responsibility that we ourselves have assumed, which protects the state from having to incur expenses to repair environmental damage. Here, however, we already see the first major problem in justifying such a view. In some cases, the negative environmental effect is not to be found "on one's own doorstep" at all, but shows up, e.g., in the consumption of resources in other countries; in eliminating the damage there, the German or Brazilian state, for example, would not incur any expenditure, but the countries in which the effect occurs would.

We can imagine various ways to further promote the idea of sustainability in tax law by granting tax benefits for environmentally friendly behavior. The question arises as to whether tax measures should be directed at the level of companies or the level of consumers. At the business level, new regulations would have to be made in the areas of income, corporate and trade tax. At the consumer level, regulations would be possible in the areas of consumption and transfer taxes, for instance VAT and energy or electricity tax. Both levels should be considered and expanded in the future to make industrial production and individual consumption more sustainable.

Options would include, for example, the abolition of subsidies which are harmful for the climate and the environment. Thus, the new German government coalition aims to gain new budgetary means by removing environmentally harmful subsidies.¹⁷ Tax reliefs, such as the exemption of kerosene from energy tax, the lower taxation of diesel compared to petroleum or the taxation of company cars as well as the commuting allowance are technically not considered as subsidies, but may be worth a revision considering their adverse effect on climate and environment.

Value added tax can have a large effect on creating environmental incentives by lowering the price for the tax payer. It is therefore surprising that the legislature hardly uses these possibilities. There are only small application areas for environmental aspects in relation to VAT. In similar vein the legislature has made little use of the area of income taxes. Furthermore, the various policy options are not ordered and coordinated in the legal text. Some benefits are for private persons, some are for business owners. Some benefits directly lower the tax, some the earnings. So, all in all it is an uncoordinated system, which is difficult to understand. A direct link between environmental goals and tax breaks would be desirable.

¹⁷ Https://www.spd.de/fileadmin/Dokumente/Koalitionsvertrag/Koalitionsvertrag_2021-2025 .pdf, p. 162, last visit on 5 February 2022.

Numerous environmental aspects could be implemented in law applicable to non-profit activities, if the tax privileges were aligned with public welfare principles (ECG). This could include, for example, granting the full amount of tax privileges only if the activity is not harmful to the environment. It seems disproportionate to base the entire non-profit law on environmental considerations alone. However, it would be possible to apply different levels of tax incentives to specifically promote environmental aspects, so that, for example, non-profit climate-friendly organizations and donations to the same could be rewarded with higher tax incentives than others.

From Brazil's point of view, all taxes must be created respecting the principle of balanced environment, but most of its taxes (around 92) were created mainly in systems prior to the 1988 federal constitution. As a starting point, there is a need to simplify the existing system and create homogeneous tax incentives to be granted by the level of government. Another important aspect is to implement a methodology for monitoring and evaluating the impacts of the benefits granted. The interesting experiences that Brazilian municipalities have made with social participation programmes, and integrated into their social economic development plans, could here offer a model for other levels of government in Brazil. Thought should also be given to a unified green tax system.

As ideas to improve the current system in Brazil regarding income tax, the country could create accelerated depreciation options for fixed assets with ecological potential – notably for corporate tax. Another idea would be to create a national statute for sustainability in municipal taxation of services and urban and rural land ownership. This would help to homogenize and disseminate these benefits among Brazilian municipalities. Finally, Brazil could consider introducing tax credits for the industrial recycling chain. Together such measures would offer a starting point for simplification and for creating a unified green tax system.

In all of the above, the systematic dissemination of best practices has a crucial role to play, including by encouraging the participation of society and educational institutions in projects aimed at the environment. The participation of these actors generates commitment and helps in the inspection and monitoring of project results.

Conclusion

The UN 2030 Agenda is an opportunity for countries, civil society, academia and the private sector, to promote fundamental changes in the way they

act in relation to sustainable development and devise strategies to mobilize stakeholders to implement the commitments and goals made by the 2030 Agenda, given the need for greater integration and coordination of the actors involved in the search for coherent public policies in favour of a long-term vision of preserving the common good.

As discussed above, both Germany and Brazil presently lack a uniform tax system that systematically takes into account the sustainable economy and favors companies that consider the common good in addition to their free business activities. This is something that requires legislative attention in both countries. In the process, it will be necessary to pay attention to environmental issues where the use of natural resources, greenhouse gas emissions, pollution, energy efficiency and waste management are optimised. It will be essential to invest in projects that formulates ways to reuse material resources, to have more transparent policies and to invest in social actions in order to succeed in the new economic order that will emerge.

Bibliography

- BRAZIL. Constitution (1988). Constitution of the Federative Republic of Brazil. Brasília, DF, Senate,1998, available at http://www.planalto.gov.br/ccivil_03/constituicao/constituicao. htm. Accessed on 15/11/2021.
- BRAZIL. Law No. 5172, of October 25, 1966, available at http://www.planalto.gov.br/ccivil_03/leis/l5172compilado.htm Accessed on 11/11/2021.
- BRAZIL. Cosit Solution no. 1/21, available at http://normas.receita.fazenda.gov.br/sijut2consul ta/link.action?visao=anotado&idAto=114982. Accessed on 18/11/2021.
- BARDIN, L. (2016). Análise de conteúdo. (3a edition, L. A. Reto & Pinheiro, Trad.). São Paulo: Edition 70. (Original work published in 1977).
- BECK Online-Kommentar, Grundgesetz, 49th edition, Stand: 15.11.2021.
- BRANDIS/HEUERMANN (vormals Blümich), EStG Kommentar, 2022 Loseblatt Kommentar.
- CNM Orientações para a Gestão Ambiental Municipal Núcleo de desenvolvimento territorial Apr/2019, available at https://www.cnm.org.br/cms/biblioteca/documentos/Orientações%20para%20a%20Gestão%20Ambiental%20Municipal%20(2019).pdf. Accessed on 20/11/2021.
- COSTA, Gabrieli R. A. O Imposto sobre a Propriedade Rural, available at https://jus.com.br/artigos/55516/o-imposto-sobre-a-propriedade-rural/4. Accessed on 11/20/2021. 2017.
- DANTAS, J.T. IPTU Verde e o Direito a Cidade Sustentável-2014. Revista do Programa de Pós-Graduação em Direito da Universidade Federal da Bahia nº.26/2014.
- ECOLOGICAL IPVA, available at https://www.revistaea.org/artigo.php?idartigo=3824. Accessed on 12/02/2022.

- ENDO, Eliane Akiko IPTU e ISS ecológico: proposta de política pública para o Município de Curitiba Paraná / Dissertação de Mestrado.Universidade Tecnológica Federal do Paraná, Brasil, 2020.
- GERMAN FEDERAL MINISTRY OF FINANCE, 28th Federal Subsidy Report (2021).
- JUNIOR, Onofre. A. B.; ANDRADE, A. O.; GUIMARAES, Samuel G.C. Considerações sobre o IPTU verde CONJUR 2021, available at https://www.conjur.com.br/2021-fev-24/opiniao-consideracoes-iptu-verde. Accessed on 11/15/2021.
- MARINS, James; TEODOROVICZ, Jeferson. Extrafiscalidade socioambiental. Revista Tributária e de Finanças Públicas 90 jan. / fev. 2010: 73-123.
- MONTERO, C. E. P., (2011) Extrafiscalidade e meio ambiente: O tributo como instrumento de proteção ambiental, Reflexões sobre a tributação ambiental no Brasil e na Costa Rica. 306 f. Tese de doutorado. Universidade do Estado do Rio de Janeiro. Rio de Janeiro, RJ, Brasil.
- PELEGRINI, Luciana Tomiko Fujimoto. Aplicabilidade da extrafiscalidade do imposto Territorial Rural (ITR). Revista Tributária e de Finanças Públicas, São Paulo, ano 17, n. 87, p. 188-200, Jul./Aug. 2009.
- PIMENTA, Daniel de Magalhães. Limitações à extrafiscalidade aplicáveis ao fator acidentário de prevenção: FAP. Revista Brasileira de Políticas Públicas, v. 6, n. 1., p. 77, jan./jul. 2016.
- RIBEIRO, M. de F., & FERREIRA, J. S. A. B. (2011). O papel do estado no desenvolvimento econômico sustentável: reflexões sobre a tributação ambiental como instrumento de política pública. Hiléia: Revista do Direito Ambiental da Amazônia, n. 17, p. 136-16.
- ROTA 2030 PROGRAM, available at https://www.rota2030.com.br/beneficios-fiscais-rota-2030/. Accessed on 11/02/2022.
- SPD, Mehr Fortschritt wagen, Bündnis für Freiheit, Gerechtigkeit und Nachhaltigkeit, Koalitionsvertrag 2021-2025 zwischen der Sozialdemokratischen Partei Deutschlands (SPD), Bündnis 90/Die Grünen und den Freien Demokraten (FDP), available at https://www.spd. de/fileadmin/Dokumente/Koalitionsvertrag/Koalitionsvertrag 2021-2025.pdf.