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# ENVIRONMENTALLY ORIENTED TAX LAW AND THE BRAZILIAN TAX SPECIES

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## ABSTRACT

The theme of this paper is environmental taxation in Brazil and, more specifically, the function of tax in regard to environmental protection – taxation on fiscal and non-fiscal purposes –, as well as the possibilities and limits of the environmental use of tax species referred to in the Brazilian Constitution. The objectives are, on the one hand, to demonstrate that taxes can be created with an environmental orientation, and, on the other hand, to expose doctrinal divergences and convergences concerning the modalities of environmental taxation regarding its use in the different kinds of Brazilian tax, especially tax and contribution to intervene in the economic domain. The article uses bibliographic and legislation research as a method to show the reader the existence of agreements and disagreements among some of the authors who approach the subject. It concludes that, except for the divergence related to tax, the doctrine allows for the use of the several Brazilian tax species to contribute to environmental preservation.

**Keywords:** Environmental taxation; Development; State Intervention; Tax species; Fundamental rights.

*DIREITO TRIBUTÁRIO AMBIENTALMENTE ORIENTADO  
E AS ESPÉCIES TRIBUTÁRIAS NO BRASIL*

**RESUMO**

*O tema do artigo é a tributação ambiental no Brasil, especificamente, as funções do tributo – fiscal e extrafiscal – em relação à proteção do meio ambiente e às possibilidades e limites da utilização ambiental das espécies tributárias previstas na Constituição. Os objetivos do trabalho são de demonstrar que os tributos podem ser instituídos com orientação ambiental, de um lado, e expor a existência de divergências e de convergências doutrinárias a respeito das modalidades de tributação ambiental no que diz respeito à sua utilização em impostos, taxas, contribuição de melhoria, empréstimos compulsórios e contribuições, de outro, especialmente das contribuições de intervenção no domínio econômico. Como método, o artigo utiliza a pesquisa bibliográfica e legislativa, buscando demonstrar ao leitor a existência de concordâncias e de discordâncias entre alguns dos autores que tratam do assunto. Conclui que, exceto pela divergência em relação aos impostos, a doutrina admite a utilização das várias espécies tributárias brasileiras para contribuir com a preservação ambiental.*

**Palavras-chave:** *Tributação ambiental; Desenvolvimento; Intervenção do Estado; Espécies tributárias; Direitos fundamentais.*

## INTRODUCTION

Sustainable development is a systemic and complex concept. It involves, at least, economic, social, environmental, human, cultural, ethical and legal-political development, without being reduced to any of those dimensions. In Brazil, it was constitutionally lifted to the level of development policies.

Among the public policies that may affect development by promoting it, by complicating it or by making it impracticable are tax policies. Tax, especially when used on extra fiscal purposes, has shown to be an important tool for government intervention in economic activities worldwide. And, more specifically, the tool can be used to protect the environment and to promote sustainable conducts and habits.

This paper assesses the possible modalities of environmental tax in the light of the Brazilian constitutional text. In the beginning, it describes the relationships between development and sustainability. Then, it talks about environmental tax to finally conclude by examining the possible modalities of environmental tax in Brazil.

## 1 DEVELOPMENT AND SUSTAINABILITY

When sustainability is consecrated as a development model, a country has to protect the environment to be seen as a developed country. Public policies are used to intervene in the economy in order to reach, among other objectives, environmental quality once the defense of the environment is one of the general principles of the economic activity, according to article 170, VI of the Constitution.

The current context of legal science tries to integrate economic law and environmental law by using institutes that aim at the maintenance of the productive system and the resulting economic development in a way that is compatible with environmental issues. Harmony between economic development and environmental protection has to be one of the elements to insure the balanced development of societies.

Thereby, economic law and environmental law are not only interconnected, but they also have convergent concerns, such as improving people's wellness and quality of life, which implies in environmental balance, allied to the stability of the productive process (DERANI, 2008, p. 48). Economic law and environmental law standards are part of the

economic policy in a broad sense, which operates, from one side, with the guidelines of market activities and, from the other side, with environmental issues, promoting the use of business measures to, for example, recycle and reuse the garbage that is produced, adopt industrial equipment that give priority to a non-polluting production, reverse logistics techniques and so on.

In spite of that, the relationship between economic development and environment is at times conflictive in the constitutional text. However, they can be conciliated to generate what José Afonso da Silva calls the “balanced exploitation of natural resources within the limits of the satisfaction of the needs and wellness of the present generation, as well as the conservation of the interests of future generations”, in a concept of sustainable development that is compatible with the Brundtland Report. That concept demands, the author says, economic growth with income distribution to allow for the reduction of inequalities and poverty eradication. Development that fails to meet the needs of the population as a whole cannot be considered sustainable development (SILVA, 2004, p. 27).

As we can see, sustainable development presents a relevant ethical and political aspect when it says that the current development cannot impair future generations. In addition to that, it is characterized by the progress of economy in an adjusted way through the consistent use of natural resources. It gives priority to the idea of efficiency only economically speaking in regards to means of production, but also concerning the respect for those resources. Certain technological conquers have suggested several ecologically feasible solutions such as the possibility of replacing pesticides, which generate human and natural contamination, by the biological control of plague in agriculture, recycling metal, glass, paper and even plastic, replacing fossil fuels by renewable fuels from several non-pollutant sources (DOMINGUES, 2007, p. 20).

The doctrine confirms the existence of a “sustainable development law”, which involves and relates economic law and environmental law subjects, allying economic development to the full accomplishment of human potentials. Thus, sustainable development results from the relationship between environment and economy (MATTHES, 2011, p. 47).

The coordination between economic law standards and social-environment requirements creates that broad field of sustainable development

law – not an independent branch of law, as Cristiane Derani says (2008, p. 155), but a focus on the legal that does not separate economic growth and income distribution on the one hand, and environmental protection on the other hand into different and non-related fields.

This doctrinal position finds support in the constitutional text. Although the Constitution does not use the expression “sustainable development”, it includes the right to defend and preserve the environment for the present and the future generations, which represents the essence of sustainability and that is, at least, an implicit principle (MACHADO, 2012, p. 89). In order to get to an efficient operational concept for sustainability, Juarez Freitas (2011, p. 41) highlights essential elements:

(1) the nature of the directly applicable constitutional principle, (2) the effectiveness (finding fair results, not only the ability to produce legal effects), (3) the efficiency (use of appropriate means), (4) the clean environment (decontaminated and healthy), (5) the probity (explicit inclusion of the ethical dimension), (6) the prevention (obligation to avoid damages that are sure), (7) the precaution (obligation to avoid highly probable damages), (8) the intergenerational solidarity, recognizing the rights of present and future generations, (9) the responsibility of the State and the society and (10) wellness (above material needs).

Considering such elements, the author defines what he calls the “principle of sustainability”:

It is the constitutional principle that defines, with direct and immediate effectiveness, the responsibility of the State and the society for the solidary fulfillment of the material and non-material, socially inclusive, durable and fair, environmentally clean, innovative, ethical and efficient development to insure, preferably in a preventive and precautionary way, in the present and the future, the right to wellness.

Or, in a summarized formula: it is the constitutional principle that determines the promotion of social, economic, environmental, ethical and legal-political development to insure favorable conditions for the well-being of present and future generations (FREITAS, 2011, p. 50).

That promotion of development may take place in different ways. One of the main ones is by means of an intervention in the economic order with the implementation of public policies to preserve the environment. Among the most relevant measures on that purpose is environmental

taxation that, considering the constitutional value given to the environment, can be used as one of the instruments to reach environmental development. In fact, public policies require joint actions between the economic, tax and environmental areas, taking costs and prices, tax load, individual, social, collective and diffuse rights into account, in a complex network of elements that define each other mutually. The extrafiscality of taxation is a valuable instrument to be used by the economic policy for sustainable economic practice, although it has to be used carefully due to its potentially restrictive characteristics in what regards fundamental rights (FOLLONI, 2014, p. 211).

## 2 ENVIRONMENTAL TAXATION

The obligation of the State and the society to defend and preserve the environment is spread all over the constitutional text so that all the branches of the legal science are integrated and have to contribute for the respect for sustainability. It is the transversality of socio-environmental law that the doctrine talks about (SOUZA FILHO, 2011, p. 14). That transversality reaches tax law. At least, taxation cannot be an obstacle for sustainable development. At the most, it may be an important instrument for the protection of environment as tax, especially used in its extra fiscal bias, can give incentive to environmentally appropriate production and consumption and also to discourage the use of outdated technologies, predatory production and consumption.

Environmental taxation is defined by Regina Helena Costa (2004, p. 303) as “the use of tax instruments to guide the behavior of taxpayers in favor of environment, as well as to generate the necessary resources for the provision of public services of an environmental nature.” As we can see, the relationship between tax and the environment happens both in the administration of income and expenses by the State in its financial activity and in its conduct inducing extra fiscal function (SEBASTIÃO, 2006, p. 289). That is also the understanding of Maria de Fátima Ribeiro and Jussara Ferreira (2005, p. 665): “Environmental taxation can be understood as the use of tax instruments with two purposes: the generation of resources to pay for public services of an environmental nature and guiding the behavior of taxpayers towards environmental preservation”. The fiscal and extra fiscal aspects of the tax function are related to sustainable development.

In what concerns the extra fiscal aspect, ecologically oriented

taxes are the ones that influence the economic decision so as to make the more ecologically suitable option more interesting (FERRAZ, 2005, p. 341). If the costs of environmental degradation are not imbedded into prices, economic-tax measures are not going to be ecologically appropriate, at first. Thus, tax may have the function of internalizing environmental costs as they add to the cost of each good the cost that its consumption represents in environmental terms.

In regard to environmental taxation, the idea that environmental costs are considered the negative externalities of the economy, ascribing the polluter with the social cost of the pollution generated by him/herself, may materialize by means of the so called Pigouvian tax, named after Arthur Cecil Pigou, an economist from the Cambridge University who supported the need for governmental intervention in price formation in order to internalize negative externalities.

So, a Pigouvian tax internalizes externalities. As the negative externalities may have a socio-environmental nature, the Pigouvian tax can take the form of socio-environmentally guided tax to internalize environmental costs. As the tax would be due by the producer and economically borne by the consumer of especially polluting goods or services, we would have the implementation of the polluter-payer principles and, indirectly, the consumer-payer – legal tax on production creating an economic burden for consumption (FOLLONI, 2012, p. 268). On that internalization of environmental externalities, Cristiane Derani and Kelly Schaper Soriano de Souza (2013, p. 266) say:

The introduction of legal-economic instruments to environment management reflects the change to the perception of the availability of natural resources, whose shortage is then recognized by introducing it into the circular flow of economy in the form of externalities. In this process, the main concern is how to internalize the external environmental costs so that final prices reflect the appropriation of goods and services by the productive process, a possible solution for the environmental problem.

With the internalization of externalities, costs would increase, which could generate some results: in case the price increase fails to inhibit consumption, tax collection would increase, allowing for the use of the surplus to recover damages to the environment. Otherwise, if the price increase resulted in decreased consumption, good production levels would possibly happen and, as a consequence, so would the externalities

integrated by the damages to the environment. In the first case, there would be a fiscal and collection effect; in the second one, an extra fiscal effect with the induction of environmentally desirable conducts through taxation. That effect is different from the sanctionatory characteristics of the legal regulation once it does not fall on an illegal activity (MODÉ, 2011, p. 123). The doctrine also supports that this environmental taxation should not be an increase to the tax load, but it should replace or decrease other existing tax, guiding taxation to extra fiscal purposes (LOBATO; ALMEIDA, 2005, p. 632). From the point of view of Consuelo Yoshida (2005, p. 537), the following are the main objectives of the so called eco-tax:

- 1) to minimize the environmental damage by internalizing its costs without hindering industrial development (otherwise it could generate negative effects on the development, changing its nature);
- 2) to influence the conduct of passive subjects so as to reduce their polluting activities;
- 3) to become indemnity instruments for the society;
- 4) to create an incentive to reduce the number of polluting products whose success depends on a high level of information given to the population and the existence of a capable collecting body;
- 5) source to finance the environmental cost by using, for example, collection to develop safety devices or to reduce the cost of the recycled product.

Those considerations also depend on considering the possible modalities of environmental tax in the Brazilian law.

### **3 POSSIBLE ENVIRONMENTAL TAXES IN BRAZIL: DIVERGENCES AND CONVERGENCES**

In compared law, there are countries that apply the polluter-payer principle by creating specific tax on the emission of polluting substances or tax with burdensome rates on harmful products so as to stimulate the search for new technologies that do not attack the environment. That is easier in countries whose Constitution is shorter and analytical in terms of tax than Brazil.

Our legal tax system is unique because it is essentially outlined in the Constitution itself, differently from what happens in most countries in which the constitutional texts pay little attention to taxation. Our system is stricter and it gives little freedom to the Legislative and Executive Powers regarding tax issues (CARRAZZA, 2006, p. 47). Maybe for that reason,

the experience of environmental taxation in Brazil is incipient according to Regina Helena Costa (2004, p. 307). That represents a problem once different taxation on products and services depending on their environmental impact or their preparation and provision processes, for the defense, preservation or promotion of an ecologically balance environment, is going to be pursuant to the constitutional principles of the Economic Order and, thus, pursuant to the Constitution.

In fact, the Constitution forecasts different taxation on essential products through the principle of rate selectivity applicable to IPI (excise tax) – mandatorily – and to ICMS (tax on goods and services) – optionally. However, the doctrine says that selectivity cannot be seen just for being essential for individual use and consumption, and also according to the possibility of environmental preservation (RIBEIRO; FERREIRA, 2005, p. 66). The same applies to progressivity: together with selectivity, they could possibly be instruments for environmental protection as they modulate taxation according to environmental parameters.

However, the doctrinal divergence regarding the possibility of environmentally using tax in Brazil is strong.

### **3.1 Environmental tax**

In what concerns the use of tax on environmental purposes, for example, that divergence is quite clear.

Some authors understand the possibility of environmental taxation in Brazil is restricted. As relevant examples of that trend, we can list Roberto Ferraz. This author states that, among tax species, each one has special constitutionally defined characteristics that determine the possibilities of using it on environmentally oriented purposes. As for tax, for example, the difference between taxpayers is made according to the principle of the contributive capacity and not according to the level of environmental harmfulness. For that author (2005, p. 347), collecting different rates according to the suitability of the taxpayer's activity to environmental preservation parameters would be unconstitutional once it harms the principles of equality and contributive capacity. Besides, another issue pointed out by Pedro Manuel Herrera Molina would also be relevant in the Brazilian law: the spread of special tax. For the author, "La verdadera 'reforma fiscal ecológica' debe llevarse a cabo introduciendo el interés ecológico en el sistema fiscal y no convirtiendo el ordenamiento tributario

en una selva de impuestos indirectos” (*apud* TÔRRES, 2005, p. 99).

Heleno Tôrres (2005, p. 109) has the same opinion. For that author, there is no constitutional permission for the creation of an ecological tax in Brazil, except for the exercise of the residual competence of the Federal Government in article 154, I and pursuant to its limits. And it is also not possible to create funds from already existing tax once article 167, IV of the Constitution imposes limits to it. The author registers the need to meet restrictions to the economic repercussion to avoid that product consumers are the effective taxpayers of environmental taxation. The mere environmental destination of resources collected does not configure environmental taxation from the standpoint of that author.

On the other hand, there are authors who understand that the possibility of environmental taxation in Brazil is quite extensive.

Lídia Maria Lopes Rodrigues Ribas, for example, highlights that environmentally oriented tax does not necessarily needs to be new tax. It is enough to apply existing tax oriented to environment protection. Tax on consumption, which economically reflects on taxpayers, is an example listed by the author: “extrafiscality may be linked to consumption tax, for example, ICMS and IPI, whose selectivity also takes into account the relevance of goods according to environmental degradation” (2005, p. 698).

A similar opinion is given by Flávio Berti (2006, p. 77), for whom the use of extrafiscality is a way to carry out public policies that allow for development. The author states that the extra fiscal use of IPI, for example, may be applied as a way to stimulate the implementation of development plans not only at the economic and social levels, but also at the environmental ones. He also admits progressive taxation according to direct or indirect environmental damages, such as a variation of IPVA (tax on automotive vehicles) depending on the level of pollution generated by the vehicles.

Regina Helena Costa (2005, p. 325) is another important author who understands that there are broader constitutional possibilities for environmental taxation and she lists several possibilities. Income Tax, for example, may include incentive for environmental protection such as deductions and exemptions for environmentally oriented behavior. IPTU (Urban Property Tax) and ITR (Rural Property Tax) could also be excellent means of environmental taxation, aligned to the social purpose of property foreseen on the Constitution. IPI and ICMS may have their selectivity

adapted to environmental preservation. She also talks about the possibility that IPVA places stronger burdens on more pollutant vehicles and less stronger ones on the ones that pollute less, as it is the case of the incentive given to the use of gas or alcohol instead of gasoline. Tax on Services could also incentive the provision of services that have an environmental characteristic such as ecotourism.

It is important to highlight that provision in article 167, IV of the Constitution, which forbids tax income to be linked to specific funds, bodies or expenses, obviously does not create obstacles for budgetary laws to separate part of the tax income to be applied to environmental preservation programs (FOLLONI, 2013, p. 275).

Thus, the opinions of the most important authors vary a lot: from the ones who do not admit any possibility of tax with an environmental orientation, passing by the authors who only admit it in the residual competence of the Constitution, to the ones that reserve its use to tax on consumption – especially IPI and ICMS – and the ones that admit broad possibilities.

### **3.2 Environmental Fees**

Fees are tax due because of the regular exercise of the power of police or the provision of specific and divisible public services. The use of fees on environmental purposes is more often accepted by the doctrine than the one of tax.

Roberto Ferraz, who has a limiting view over the possibility of environmental tax, admits the use of environmentally oriented fees. That is because, in the constitutional system, the assumption is public interest protected by inspection or service provision. Due to those characteristics, fees would be very effective regarding environment protection once they would be charged for both the environment inspection activity and for environment service provision. There are limits such as just collecting amounts related to the cost of the State activity of inspection or service provision. Once those limits are respected, the author (2005, p. 348) says, “Everything is going to depend on the creativity of the public administration. It is possible to have fees regarding the inspection of pollutant emissions by vehicles or industries, regarding the use of water, the protection of soil, fauna and flora”.

Heleno Tôrres (2005, p. 110), who also has restrictions in regards

to tax, accepts the environmentally oriented use of fees:

[...] increasing police power fees, such as the ones charged on periodical permitting, according to the level of compliance or not with obligations related to the environmental domains of activity, could also be a timely tax solution fully authorized by the Constitution in case of non-compliance with environmental standards. That is, increasing police power fees, in those cases, would be linked to the kind and not to the illegality itself, but exclusively as a condition for the continuity of the exploration in the current conditions, no harm to the application of fines and other instruments to define damages.

Similarly, Lídia Maria Lopes Rodrigues Ribas (2005, p. 699) understands that fees are easy and immediate application instruments in what regards reaching the ecological purposes. They can have the characteristics of a fee on pollution, in return for environmental cleaning or recovery and for the exercise of police power both in inspection and limitation of especially polluting activities.

An example is the creation by the Federal Government of an Environmental Control and Inspection Fee – TCFA, whose triggering event is the regular exercise of the police power granted to the Brazilian Institute of Environment and Renewable Natural Resources – IBAMA to control and inspect potentially polluting activities that use natural resources, pursuant to article 17-B, Law n. 6.938/1991, wording by article n. 1, Law n. 10.165/2000. Another one would be the environmental preservation fee required in the Fernando de Noronha Archipelago in Pernambuco based on Law n. 10.403/1989, changed by Law n. 11.305/1995, whose triggering event, pursuant to article 84, is “the effective or potential use by visitors of the physical infrastructure implemented in the State District, and the access and fruition of the natural and historic heritage of Fernando de Noronha Archipelago”. Regina Helena Costa (2004, p. 303) also admits the environmental use of fees.

### **3.3 Contribution to improvement**

The contribution to improvement is a tax that is created and collected when public federal, state or city works improve the value of private property.

That tax also seems to be quite accepted by the doctrine that

addresses environmental possibilities of taxation. Roberto Ferraz, for example, who is restrictive in what concerns tax but who admits environmental taxation through fees, also accepts it in regards to the contributions to improvement. Although this instrument is not often used in Brazil, as the author admits, it could be aimed at environmentally oriented actions, not due to the induction of behaviors, but make environmental public policies economically feasible through public works. That could be carried out as follows:

When the public power decides to create environmental preservation areas such as squares, parks and reserves, especially next to urban agglomerations: a) it would evaluate the area and its surroundings, as required by the law addressing the contribution for improvement; b) it would require the contribution corresponding to the increase of value of property surrounding the preservation area (public works); c) it would indemnify the owner of the property over which falls the mandatory preservation according to the real value of the real estate with resources from the collection; d) it would be able to bear other similar expropriation (FERRAZ, 2005, p. 349).

Regina Helena Costa (2004, p. 303) and Lídia Maria Lopes Rodrigues Ribas (2005, p. 701) also agree.

### **3.4 Compulsory Loans**

The Constitution reserves to the Federal Government the exclusive competence to create compulsory loans in two events foreseen in article 148: to meet extraordinary expenses due to public disasters, external wars or their eminence, in case of urgent public investment and relevant national interest.

According to Roberto Ferraz (2005, p. 349), compulsory loans can be instruments to make environmental public policies feasible once they can be created in case of public disasters that may be environmental, as well as for investment on the purpose of environment protection. That is especially interesting due to the constitutional requirement that resources collected are used with those objectives.

In fact, it is not possible to disagree with that position and further divergence is also not possible. However, compulsory loans in the Brazilian law are little operative once they depend on a complementary law

and they have to be returned to the citizen later on. In general, the public power prefers alternatives that do not present those obstacles and recent experience in Brazil shows that this tax figure is not frequently used.

### **3.5 Contributions**

Contributions created by the Federal Government – except in case of social security contributions related to public state and city servers – can also be used for environmental protection, especially in what concerns contributions for interventions to the public domain – CIDEs.

That tax is only enforceable at a certain level of economy and it is not necessarily guided by the principle of contributive capacity. Thus, it admits oriented environmental taxation, especially in order to redirect behaviors through the internalization of environmental costs, with no serious doctrinal divergences. Roberto Ferraz (2005, p. 350) admits that “regarding that figure in the Brazilian tax law, the objections made by pointing out the environmentally oriented tax as a violation to the principle of equality (made fiscally concrete in the criterion of the contributive capacity) are not acceptable”, that is, the objections to the environmental use of tax.

The constitutional text sets forth in article 177, § 4th, II, *b* that the law that created the contribution for interventions to the public domain on the import or trade of oil and its derivatives, natural gas and its derivatives, and fuel alcohol has to state that resources collected are to be directed, besides other destinations, to fund environmental projects related to the oil and gas industry. Thereby, not only due to the extra fiscal characteristics, but also to the destination of the results, CIDEs can be used for the protection of the environment.

## **FINAL CONSIDERATIONS**

Contemporary society has shown a lot of concern about the ecologically balanced environment. The current social, political, economic and legal context forces the State to search for sustainable development. That proves the existence of a social-environmental State that is characterized, among other aspects, by intense constitutional concern about environmental issues. State intervention to insure an ecologically balanced environment materializes in the economic order through the use of public policies aimed

at sustainability, without which fundamental rights are unfeasible.

One cannot suppose that taxation is an activity that is able to solve environmental issues for itself. And not even that it has *a priori* a protagonist role in that sense. However, it does not mean that taxation has no contribution to offer to environment protection.

The article tried to demonstrate how important sectors of the national legal doctrine admit the possibility to use tax on environmental purposes. Although there is divergence regarding the legal regime of tax to which some authors deny environmental orientation while others fully admit that orientation, the other tax species are, at first, suitable instruments for environmental protection.

Efficient environment protection depends on the measures to discourage environment degradation and pollution, together with measures to give incentive to compliance with environmental requirements based on economic-financial attractions and direct public investment. Thus, the suitable environmental taxation based on the constitutional value of the environment, whose balance is lifted to the condition of a fundamental right, may be one of the instruments to search for sustainable development with a concern about the present and future generations, both in the fiscal, tax collection function and in the extra fiscal one, a driver for environmentally desirable conducts.

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