

ROHSTOFFFXTRAKTIVISMUS IN LATFINAMERIKA UND DEM MAGHREB

## **Environmental Tax Reform in Latin America**

<u>№ 4|20</u>23

Emergencies and particularities of the green fiscal agenda in highly unequal countries specializing in natural resource extraction

Juan Pablo Jiménez **University of Buenos Aires** 

info@extractivism.de | www.extractivism.de

## The Author

**Dr. Juan Pablo Jiménez** Juan Pablo Jiménez is a lecturer of Public Finance at the Latin American Faculty of Social Sciences (FLACSO) from the University of Buenos Aires. He is also a researcher at the Center for Economic Research (CINVE) in Uruguay and the Vice President of the Ibero-American Association for Local Financing (AIFIL). He is a fellow at <a href="http://www.extractivism.de">www.extractivism.de</a>.

#### DOI: 10.17170/kobra-202305268121

**Extractivism Policy Brief** is an Open Access online publication downloaded freely at <u>www.extractivism.de</u>. Readers are free to share, copy, and redistribute this document in any medium or format for any purpose, even commercially, according to the <u>Attribution-NonCommercial-NoDerivatives 4.0 Germany (CC BY-NC-ND 4.0)</u>. Conditions imply that no changes are made to the text, and writers and the <u>www.extractivism.de</u> project are referenced correctly as the original. Extractivism Policy Briefs publish on social-economic, cultural, political, and timely topics concerning extractivism in both regions. Extractivism.de team is responsible for reviewing, fact-checking, editing, and publishing the final policy briefs. The opinions expressed in each publication are exclusive of the respective authors and do not necessarily reflect the views of the project. Extractivism.de cannot be held liable for any consequences concerning a policy brief following its publication.

© Extractivism.de, 2023, All rights reserved.

## IN SHORT

- Latin American countries need to implement an agenda of green tax reforms to adapt their current development path and better respond to climate change. The decarbonization of the energy matrix is essential to mitigate future challenges.
- These governments have the potential to raise environmentally oriented taxes to generate additional revenues. Objective should be to adapt to the energy transition, attenuate extractivism and promote better income distribution and growth.
- The design and implementation of green fiscal policy should be gradual and coordinated with other non-fiscal environment policies and aware of national particularities
- Lateinamerika muss eine Agenda f
  ür gr
  üne Steuerreformen umsetzen, um den derzeitigen Entwicklungspfad anzupassen und besser auf den Klimawandel reagieren zu k
  önnen. Die Dekarbonisierung der Energiematrix ist unerl
  ässlich, um k
  ünftige Herausforderungen zu bew
  ältigen.
- Regierungen haben das Potenzial, umweltorientierte Steuern zu erheben, um zusätzliche Einnahmen zur Anpassung an die Energiewende zu generieren. Ziel sollte sein, Extraktivismus abzuschwächen und eine gerechtere Einkommensverteilung sowie Wachstum zu fördern.
- Die Gestaltung und Umsetzung einer grünen Steuerpolitik sollte schrittweise erfolgen und mit anderen, nicht steuerlichen Umweltpolitiken koordiniert werden, wobei die nationalen Besonderheiten zu berücksichtigen sind.
- Les pays d'Amérique latine devront introduire des réformes fiscales vertes afin d'adapter leur mode de développement actuel et de mieux répondre aux changement climatique. La décarbonisation de la matrice énergétique est essentielle pour atténuer les défis à venir.
- Ces gouvernements ont la possibilité d'augmenter les taxes vertes afin de générer des revenus supplémentaires. Objective doit etre d'adapter à la transition énergétique, atténuer l'extractivisme et faciliter la redistribution et la croissance de la richesse.
  - La conception et la mise en place d'une politique fiscale verte doivent être graduelles et coordonnées avec d'autres politiques environnementales, et sensibles aux particularités nationales.
  - Los países latinoamericanos deben implementar reformas fiscales verdes para adaptar su actual trayectoria de desarrollo y responder mejor al cambio climático. La descarbonización de la matriz energética es esencial para mitigar futuros desafíos.
  - Los gobiernos tienen el potencial de aumentar los tributos verdes para generar ingresos adicionales. Hay que adaptarse a la transición energética, atenuar el extractivismo y promover una mejor distribución y crecimiento económico.
  - El diseño y la aplicación de una política fiscal verde deben ser graduales y coordinados con otras políticas medioambientales no fiscales y ser sensibles a las particularidades nacionales.

EN

ŊF

## | Introduction<sup>1</sup>

Humanity faces one of the greatest challenges in its history: to maintain the planet inhabitable for future generations, the world must rapidly move toward decarbonized economies that minimize natural resource use. That means moving from an energy matrix based on fossil fuels to another based on less polluting energies and renewable sources. This transition is costly since it requires adapting consumption and production to a new energy source, generating multiple impacts, including redistributive ones (among social sectors, regions, and generations). These challenges are common to all countries in the world but acquire particular complexities in Latin America and the Caribbean (LAC) due to the region's particular productive, economic, and social structure.

Taking into account the urgencies and particularities of climate change, adequately designing and implementing fiscal reform related to the environment is a key tool, as it can contribute to controlling the negative externalities; generate additional financial resources that allow financing the adaptation and energy transition; mitigate the region's bias toward extractive industries; and have positive side effects on income distribution and economic growth.

Implementing an urgent and broad structural transformation is necessary to reach carbon-neutral economies between 2050-2070. Some have affirmed that climate change is a public "bad" with global causes and consequences (Tanzi, 2022; Blanchard & Tirole, 2021), but also with evident local expressions – such as extreme climate events, sea level rise, or biodiversity loss. Moreover, it is a development problem that has significant adverse effects on economic activities, social welfare, and the environment. Particularly, LAC countries have demonstrated relevant specificities concerning this topic and its effects on regional development (Galindo & Lorenzo, 2020).

Latin American and Caribbean countries are particularly vulnerable to the effects of climate change (Fanelli et al.,

2015; Galindo & Lorenzo, 2020). That is attributable to specific productive structures and processes and technological characteristics; elevated dependence on the exploitation of natural resources; a high proportion of the population under vulnerability conditions; extreme inequality of both personal and regional income; welfare state weaknesses as well as social protection and health systems' shortcomings; a high presence of vulnerable ecosystems; and an extremely varied biodiversity. These vulnerabilities, together with the lower historical greenhouse gas emissions in the region compared to developed countries, constitute features that must be considered.

This policy brief suggests the incorporation of regional specificities into the global map of climate risks and vulnerabilities. The argument is that the modality of adaptation to the risks (sustainable infrastructure), and the agenda for fiscal reforms related to the environment (green fiscal policy) are essential for building a regional strategy that allows addressing the energy transition. The importance of prioritizing green fiscal instruments is justified in the current context by their contribution, through economic incentives, to carrying out ambitious environmental objectives that must be achieved in a limited period. Thus, green fiscal policy is a powerful tool to minimize the costs associated with ecological transition while being able, at the same time, to promote development, encourage investment in less polluting technologies and generate new green jobs can foster a new economic dynamic.

However, the high level of vulnerabilities, together with some characteristics of the regional economic structures and fiscal systems makes it necessary to adapt any proposal to the reality of LAC countries. Compared to other regions, and given their historically low level of taxation, LAC governments have enormous potential to raise better taxes and increase revenues that could finance the production of public goods. From this perspective, LAC countries' environmental or green taxes

<sup>&</sup>lt;sup>1</sup> Article inspired by the concerns and reflections of Rafael Jiménez, to which the limited scope of this publication surely fails to do justice. We would like to thank Giorgio Brosio, Hans-Jurgen Burchardt, Ricardo Carciofi, Pablo Ferreri, Luis Miguel Galindo, Fernando Lorenzo, Jim Mahon, Lydia Mabel Martinez, Andrea Podestá, Ignacio Ruelas, Javier Suarez Pandiello, Gustavo Viñales, Hannes Warnecke-Berger for their support and suggestions. And the contributions and comments to previous versions of this article by the participants of the Annual International Conference "Raw Materials, the Global South and Development in the 21st Century: Mobilizing Rents, Grasping Extractivist Societies" of the Extractivism Project of the University of Kassel.

are, generally, lower as a percentage of GDP compared to OECD countries.

This policy brief seeks to justify and emphasize the urgency and relevance of prioritizing fiscal instruments related to the environment in Latin American fiscal and tax reforms. Implementing environmental tax reform tailored to the region's particularities would reduce the externalities of climate change, generate additional resources for adaptation and energy transition, mitigate the extractive bias of the region's economies and impact positively the income distribution and economic growth.

Thus, the policy brief offers a general framework ion taxation's contribution in resolving the different environmental problems in LAC countries. The framework considers particularities of the regional countries, such as the significant preexisting inequalities, high specialization in extractive industries, and vital biodiversity. This comprehensive approach suggests that to improve its impact, effectiveness, and efficiency, green fiscal policy should be coordinated with other non-fiscal environmental policies and initiatives such as regulations, contributions to ecosystem conservation, tradable permits, bonds, and green financial instruments, as well as other environmental initiatives. This policy brief will not

## **Environmental Fiscal Reform**

The concept of environmental fiscal reform (EFR) emerged towards the end of the 1980s. It was eventually consolidated in the 1990s in the framework of reforms carried out mainly in Europe (Fanelli et al., 2015). The basic idea behind the reforms was to use the pricing mechanism because it can provide information, influence incentives, correct distortions that deteriorate the environment and prevent the rational use of natural capital. Furthermore, following the principle that "the polluter should pay", the reforms sought for prices to incorporate the social cost of negative externalities; hence, the instrument proposed to achieve this was "Pigouvian" taxes (Pigou, 1920).

The evidence on environmental tax reforms at the international level is broad and varied (Gago & Labandeira, 2012; Galindo & Lorenzo, 2020). The first phase in which these reforms took place was on northern European countries, such as Finland (1990), Sweden (1991), Norway (1992), Denmark (1994), and the Netherlands (1995). There, high taxes were implemented mainly on energy. A second phase occurred in Finland (1997), Germany (1999, 2003), and the United Kingdom (1996, 2001). Although the

analyze these in-depth, although their significance and importance are recognized.

It is clear that the ecological transition will eventually introduce relevant new socioeconomic costs, considering that the region is one of the most unequal in terms of income and wealth (ECLAC, 2021). Therefore, particular attention should be paid to the distributive impacts – in the individual, regional, and intergenerational levels – linked to the introduction or intensification of environmental taxes and the establishment of mechanisms to mitigate and compensate for these effects on specific social groups and economic sectors.

For all these reasons, this policy brief states that the direction of the reforms to be faced by the governments of the region must include a comprehensive and transversal vision of the fiscal system in the face of multiple environmental challenges. Consequently, a comprehensive approach to tax reform is proposed here, which includes different instruments that should be developed and evaluated on a case-by-case basis, taking into account national particularities, sectoral heterogeneities, and the limited data availability.

tax instruments applied there were similar, they explicitly focused on what is known as fiscal recycling, or the possibility of using resources from new environmental taxes as part of a policy aimed at modifying the tax structure and introducing compensatory distributional measures, for example, reducing social security payments. This way, the aim was to simultaneously control the negative externality and promote employment, something defined as a "double dividend".

The third phase of environmental tax reforms (i.e., Ireland and Australia) included other diverse taxes, such as on solid waste, and presented a less rigid view in which tax revenues were not targeted and even contribute to consolidating public finances. Finally, there is a more heterogeneous fourth phase, in which both fiscal recycling processes and environmental tax strategies of various types, such as specific taxes, were combined with subsidy schemes and green bonds issuance. This way, the main environmental taxes are currently concentrated on energy products, motor vehicles, and activities that generate water resource pollution and various types of waste.

## The Region's Specifics for Designing an Environmental Fiscal Agenda

Four regional particularities must be considered to properly design an environmental fiscal policy as they distinct LAC countries from developed countries (Fanelli et al., 2015). They are:

1) Persistence of the concentration of income and wealth, inequality, and poverty: in the LAC region, the poverty rate is significant and there are substantial disparities in the distribution of wealth and income (Brosio & Jiménez, 2015). Therefore, special attention must be paid to the possible distributive effects of EFR implementation. In addition, it should be noted that the available evidence shows that lower-income groups and poorer regions are more vulnerable to climate change and, in general, to different types of natural disasters (Galindo & Lorenzo, 2020).

2) The importance of extractive industries: natural resources have a greater relative weight in the region, and this has and will continue to influence fiscal instruments used in the region, as well as the characteristics of the available fiscal space, as will be shown later (Brosio & Jiménez, 2012; Jiménez & Podesta, 2023).

3) Weak States: the institutional framework is usually weaker and the state shows a reduced capacity to provide basic public goods and obtain financing sources. In this sense, a large mass of subsidies for energy products, mainly on fuel consumption, poses a major challenge in

terms of environmental policy. These subsidies, which have existed for decades, mainly in the region's oil exporters, have expanded in quantity and amount in recent years, with the additional objective of compensating for international oil price increases. Currently, the prices increase is a product of the war between Russia and Ukraine and its inflation impact. These increases tend to generate effects opposed to those initially sought, harming environmental objectives by favoring excessive fuel consumption (Cetrangolo & Fontenez, 2022; Fanelli et al., 2015).

4) A lower historical level and a different carbon emission structure: the regional gas emissions contributing to the greenhouse effect is proportionally smaller than the global emissions. Most importantly, while there is indeed evidence that the primary source of emissions is energy production and consumption (as in the rest of the world), much of it also comes from agricultural activities, waste, and land use (Galindo & Lorenzo, 2020). Thus, that indicates the mitigation agenda in LAC is not limited to energy but also covers other sectors and activities – particularly those activities that are intensive in natural resources.

The specificity of natural resource allocation, high economic inequality, and lower historical greenhouse gas emissions should be considered when outlining the region's strategies in response to climate change.

## **EFR Components**

What is a green tax?

A green tax is a tax whose base is a physical unit (or a substitute for it) that has a specific negative impact on the environment (OECD, 2017). In other words, these are tax instruments that, on the side of public revenue, aim to generate changes in the behavior and investments of individuals and companies, resulting in lower emissions or sustainable use of material resources, reducing the impact on the environment (Ruiz Huerta Carbonell et al., 2022). For this, the tax base of the environmental tax must be related to the problem considered: the environmental damage of specific emissions or the use of products closely linked to this damage. Moreover, the tax rate structure should contribute to the collection of environmental damage or the achievement of predetermined environmental objectives.

This broad definition allows for the incorporation of taxes originally introduced with merely collection objectives (e.g., the taxation of hydrocarbons or cars) but undoubtedly associated to environmental effects.

Environmental taxes can be classified by their tax base according to the following typology:

- Energy (generation, distribution, and use in its different forms): taxation on fossil fuels and electricity and transport fuels, such as gasoline and diesel. Taxes on carbon and other greenhouse gases are also included.
- Motor Vehicles and Transportation: taxes on imports or sales, recurring taxes on property, registration, or use, and other taxes and charges

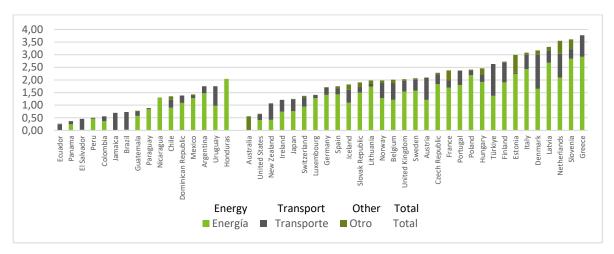
related to the transportation of people and cargo, congestion charges, last mile taxes, or delivery charges.

 Others (pollution and natural resources): taxes on substances that deplete the ozone layer, management of drinking water and wastewater, waste management, plastic waste, mining and quarrying, pesticides and fertilizers, among others.

As shown in Figure 1, environmental taxes in the region are significantly lower in terms of GDP than those applied

in OECD countries. Moreover, the importance of these taxes in the countries' tax structure is highly heterogeneous. The contrast is evident between countries such as Honduras, Uruguay, and Argentina, with an environmental tax collection between 1.5% and 2% of the respective GDP in 2020, and others such as Ecuador, Panama, or El Salvador, in which these concepts are not significant in terms of GDP. Concerning its structure, those taxes on energy are, in general, significantly more important.

#### FIGURE 1: TAX REVENUES DERIVED FROM ENVIRONMENTAL TAXES IN OECD AND SELECTED LATIN AMERICAN COUNTRIES, 2020 (% GDP).



Source: OECD Statistics Environmentally related tax revenue. Data extracted on Dec 22, 2022.

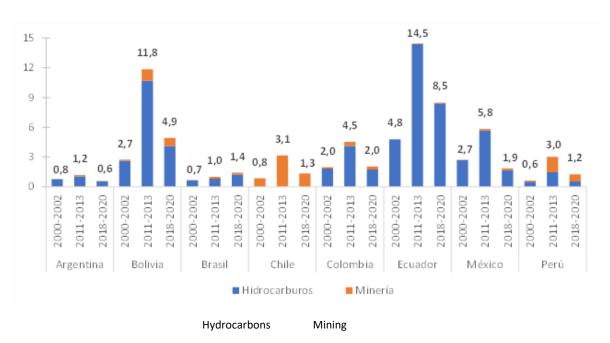
In addition to the problems related to the quantitative relevance of environmental taxation, the low "quality" in the design of many tax figures is worrying (Ruiz Huerta Carbonell et al., 2022). These qualitative factors include: the lack of taxation coverage of numerous environmental problems, sectors, or polluting activities; the persistence of tax rates that do not adequately reflect environmental impacts, frustrating extra-fiscal environmental and health protection objectives; and the label as environmental taxes of taxes that do not address environmental pollution to generate a positive environmental reputation ("greenwashing"). There is also excessive administrative complexity, an unequal and uncoordinated proliferation of figures at different levels of competence, and a lack of connection between some taxable bases and the environmental problems to be corrected (Ruiz Huerta Carbonell et al., 2022).

Taxes on the extractive industry: an imperfect but potentially significant form of environmental taxation

Although international bodies (such as OECD and EU) usually use the nomenclators to classify environmental taxes, including those on natural resources, the taxes levied on extractive exploitation and production are not usually considered environmental taxes. In fact, the EU argues that taxes on mineral and oil extraction "do not influence prices in the way that other environmental taxes, i.e., taxes on products, do" (EU, 2001). Although the dominant objective of taxation on production and exploitation is the extractive rent appropriation and the collection of tax revenues, some of them, such as royalty revenues, have a significant and often unintended environmental impact through reduced production. Therefore, although they considered are not environmental taxes, their high environmental impact in

extractive industries and their fiscal importance (Jiménez & Podestá, 2023) make them a potentially powerful tool in the design of environmental tax reform.

#### FIGURE 2: TAX REVENUES DERIVED FROM THE EXPLOITATION OF NON-RENEWABLE NATURAL RESOURCES. SELECTED COUNTRIES IN LATIN AMERICA, 2000-2020, (% GDP).



Source: Jiménez & Podestá (2023) based on ECLAC statistics.

It should be considered that the exploitation of natural resources (hydrocarbons, mining, agriculture) is of extreme importance in the region and had have a different impact on the environment, thus, requiring differentiated tax instruments. In countries specializing in hydrocarbons extraction, these activities usually have two considerable environmental impacts: one in their extraction and production and another at the time of their use and consumption.

Fiscal policy plays a central role in countries where extractive activities predominate. First, fiscal policy is essential for extracting income from these sectors, especially with the use of applicable tax instruments on extraction and production (upstream taxes), such as royalties, corporate income taxes, and windfall taxes. Second, it is necessary to define the selective consumption taxes on these products, especially by implementing fossil fuel consumption taxes. These taxes on consumption, created with eminently tax-collection purposes, gradually became the precedent and are currently the axis of green taxation.

In this regard, it is interesting to follow the evolution and impact of Colombia's recently approved tax reform from 2022 in detail, of which the largest collection source is estimated to come from the extractive sector. The goal is that the resources derived therein accelerate productive diversification in the energy transition process while generating higher income to strengthen social spending and public finances.

Broadly speaking, oil companies have two new obligations: their income will be taxed between 35 and 60 per cent, depending on the international price of crude oil, and the royalties they pay to the regions where the oil fields are based will no longer be deducted from their taxes. The same for the coal production, with the difference that the income tax will be between 35 per cent, and 45 per cent. In addition, miners will also not be able to reduce their income tax royalties. Although it is premature to assess the impact and outcome of this Colombian reform, which will only have a full impact in 2024, its approach is innovative, as it combines the use of income tax surcharges and royalties with the objective of extracting income from the sector (which has grown due to international prices) and promoting the transition to cleaner energies.

#### Distributive impact and compensation design

From the point of view of tax design, it is essential to highlight the visibility for taxpayers, usually associated with environmental taxes, which differentiates it from other regulatory alternatives and generates distributive impacts through various channels (price effects, higher costs, among others). Such transparency precisely facilitates the definition of compensatory measures or technical adjustments in these taxes to protect competitiveness or possible adverse distributive effects.

Therefore, the growing social concern about the effects of ecological transition requires special attention to distributive impacts of environmental taxes and compensatory alternatives to mitigate these effects on the individual, regional and intergenerational levels. Environmental taxes have also the advantage of collecting public revenue that can be used to compensate those affected by the introduction of these tax arrangements something other regulatory alternatives do not have. . In this regard, it should be noted that the evidence available in the region confirms that low-income groups contribute a lower proportion of greenhouse gas emissions but, at the same time, are the most susceptible to climate change (Galindo & Lorenzo, 2020). That is because low-income groups reside, usually, in regions with greater vulnerability to extreme weather events. Moreover, they tend to have lower resources and human capital to adapt to new climatic conditions or to recover productive activities income after a natural disaster, despite consuming less energy and private transport (ECLAC, 2015). At the same time, the application of fiscal instruments to encourage a sustainable environment and energy change has a significant distributive impact among families, sectors, and regions, so it is impossible to think about environmental tax reform and the political economy of its implementation without the proper design of a compensation system.

Therefore, compensation can be made through:

- Tax expenditures and modifications in the tax structure (exemptions and non-subjections, bonuses, reduced rates, etc.) to be applied to certain taxpayers.

- Subsidies that facilitate the change of facilities or equipment in certain families and companies to face the distributional and competitiveness impacts in the medium and long term.
- Personalized and limited transfers to specific regions, sectors, and socioeconomic groups (according to income level, location, family composition, among others.).

These issues, central to the current analysis and debate on taxation, play a fundamental role in defining and evaluating many of the components of an environmental tax agenda. Of course, each of the compensatory systems outlined has a fiscal cost in terms of collection and may conflict with the usefulness of environmental taxes that seek to improve the adequacy of resources and/or the efficiency of the tax system. In any case, in highly unequal societies such as those in LAC countries, the compensatory instruments design is a central part of environmental tax reform and its political economy.

#### International and Intergovernmental Coordination

Apart from the broad academic and empirical consensus on the environmental tax usefulness, many suggest that the coordination of these instruments at the international level produces additional economic and environmental benefits (Parry, 2020). That stems from the global nature of the climate change impacts. Thus, to implement these structural transformations. countries have committed themselves to meet the goals of the Sustainable Development Goals (SDGs) and the Paris Agreement on Climate Change, defined in Nationally Determined Contributions (NDCs). In addition, and considering regional and local impacts, the causes that determine the establishment of an environmental tax go beyond the territorial limits of the national or subnational entity that has implemented it. That makes the necessary adaptation of the spatial area of taxes a priority at the internal level of each country through the relevant coordination systems or the implementation of a standard policy.

Parallel to that, the allocation of environmental management powers between governmental levels is central at the intergovernmental level. According to Somanathan et al. (2014) and Oates (2001), it should be also considered that the existence of environmental problems justifies the role of sub-national administrations in this area.

That is very significant in the LAC region, given its high degree of decentralization. For the design and establishment of appropriate instruments, as well as for their practical application and monitoring, the most appropriate responsibilities allocation between different government levels may vary depending on the environmental externality's magnitude and scope. For example, while CO2 emissions from the use of fossil fuels primarily require addressing the problem from a global approach, as the externalities generated exceed the geographical limits of the jurisdiction that produces them, in the case of problems related to negative externalities, such as traffic congestion in highly populated localities, it may be more appropriate and efficient to apply corrective instruments at the local level (Cetrangolo & Fontenez, 2022).

For those reasons, special attention must be paid to governance and intergovernmental relations when designing tax interventions in decentralized contexts, insofar as responsibilities for environmental and tax policies are distributed at different territorial levels. These aspects are becoming even more relevant as sub-national governments are increasingly using the environmental taxation tool (Ruiz Huerta Carbonell et al., 2022; Brosio & Jiménez, 2015). Therefore, coordination between governmental levels for environmental protection policies should be defined according to the institutional organization and the relative advantages that each could show in the different dimensions of the policies implemented. That is particularly important in LAC, where various taxes with environmental impacts are collected and regulated by sub-national authorities, mainly applied to the production and extraction (upstream) of nonrenewable natural resources.

Additionally, some tax innovations with environmental impact are designed at the local level. For example, in some subnational governments (New York, Pennsylvania, Barcelona), the introduction of a levy or a fee that would fall on companies and platforms trading physical goods in electronic commerce are being discussed, raising issues about whether they are resident or not in the jurisdiction, or if home delivery services ("delivery") depend on the number of shipments made. For example, in the United Kingdom, the proposal arose in the framework of the Ministry of Transport's reflections on the environmental and economic impact of the distribution of these products last phase ("last mile logistics") – a motivation similar to those of taxes on plastic bags.

Hence, the intense public policy transformation process that responding to environmental challenges implies ensuring greater intergovernmental cooperation and coordination. It also demands achieving the proper and efficient use of environmental taxes since the high heterogeneity between design alternatives and ways of implementing these figures by sub-national governments may jeopardize the fulfilment of environmental objectives.

## **Recommendations and Future Challenges**

Climate change, the necessary economic decarbonization and the energy transition constitute growing threats to global public goods. Their impact is complex and manifested at the national, regional, and local levels. Thus, proposals for analysis and reform must be multidimensional and global, involving different levels of government in each country.

In the coming years, LAC countries will have to implement fundamental structural transformations to their current development trajectories to address the need for a lowcarbon economy, one that is inclusive and resilient to climate change. Hence, they will have to find ways of adapting their infrastructure to climate risks and controlling the presence of negative externalities that carry high economic, social, and environmental costs.

It is essential to align fiscal policy, directing it to modify the behaviour of economic agents that are at the base of climate change to implement these structural transformations. Otherwise, the possibility of achieving the goals established by the Sustainable Development Goals (SDGs) will be compromised as well as the commitments assumed in the Paris Agreement. As explained, LAC countries are very vulnerable to climate change and have particularities that require a different analysis framework than the environmental tax reform applied in developed countries. This way, the design of the environmental fiscal strategy in the region should pay special attention to the interactions between the global, regional, and local environmental impact of natural resource exploitation. At the same time, actions to mitigate potential unwanted distributional impacts should be introduced through appropriate compensation mechanisms to assist the affected sectors. To this end, it is crucial to align the mechanisms for extracting rents and allocating and distributing tax revenues from the extractive sector with a fiscal environmental framework, usually expressed through consumption taxes. That would support energy transition and public investment being, thus, a vital tool for environmentally sustainable and socially inclusive development.

Given that the ecological transition will introduce relevant socioeconomic costs, this policy brief suggests a gradual implementation of the proposed fiscal measures seeking to maximize these instruments advantages in terms of incentives and increase their social acceptance. Nevertheless, this path must be taken bearing in mind that there is little room for maneuver which will narrow even more over the next few years due to the accelerated deterioration of environmental quality levels. Therefore, just climate transition does not seem feasible without implementing a new green fiscal strategy.

Finally, an environmental fiscal strategy must align development goals to poverty reduction and greater progressivity in terms of income distribution to be politically feasible. In other words, a comprehensive and transversal vision of the tax system's performance in the face of multiple environmental challenges is necessary.

A set of proposals was presented in this policy brief that could be developed technically and evaluated in depth later if there is interest in its practical application. Such implementation must, nevertheless, take into account national particularities and the limited availability of data. In any case, suggestions included seek to improve the functioning of existing taxes, either through changes in their design or the intensity with which they are used. All of them must be interpreted as part of a systemic environmental tax reform to respond to the various environmental challenges and objectives facing the region's countries.

To effectively implement a new environmental fiscal strategy, the political commitment of the economic, fiscal and monetary authorities (Ministries of Economy, Housing, and Finance and the Tax Administration) is indispensable. In other words, economic leaders' more active participation in addressing climate change challenges, both at the national and sub-national levels, should be a key ingredient for the deployment of a (green) fiscal and financing strategy that is consistent with the consumption patterns and forms of production required for a carbon neutrality by the horizon 2050-2070.

In conclusion, to ensure the success of a new environmental fiscal strategy in the region, particular attention must be paid to the complex political economy dimensions posed by climate change. To date, environmental problems and the sustainable development agenda have not received the political priority they deserve in LAC countries. Indeed, there is no broad social consensus on the need to move towards a new fiscal compact that will help achieve the SDGs and meet the climate change challenges.

The policy brief sought to provide inputs for the discussion within the framework of this urgent and essential debate. The necessary process of transforming development strategies must be faced in a context characterized by historical resistance to the tax reforms implementation, which has undoubtedly been accentuated in recent years. Moreover, climate change mitigation requires combining the responsible and sustainable use of natural resources with the region's existing need to improve economic efficiency and achieve a fairer income distribution. It is, therefore, a question of promoting a broad debate in which the multiple dimensions involved in constructing a new development strategy can be combined.

### References

Blanchard, O. & Tirole, J. (2021). *Major Future Economic Challenges*. Paris: France Strategie.

Brosio, G. & Jiménez, J.P. (2012). Intergovernmental interactions between taxation of oil and gas and environmental protection. *Euroeconomica*, 5(31), 60-71.

Brosio, G. & Jiménez, J.P. (2015). Equalization grants and asymmetric sharing of natural resources: options for Latin America. *Urban Public Economics Review*, 21, 12-63.

CEPAL (2015). La economía del cambio climático en América Latina y el Caribe. Paradojas y desafíos del desarrollo sostenible. Santiago de Chile: CEPAL.

CEPAL (2021). Panorama Social de América Latina y el Caribe 2021. Santiago de Chile: CEPAL.

Cetrángolo, O. & Fonteñez, B. (2022). Oportunidades para una recuperación pospandemia más sostenible y con bajas emisiones de carbono en la Argentina: política fiscal ambiental. Documentos de Proyectos (LC/TS.2021/220). Santiago de Chile: CEPAL.

Fanelli, J.M., Jiménez, J.P., & Azcúnaga, I.L. (2015). La reforma fiscal ambiental en América Latina. Colección de Documentos de Proyecto LC/W.658. Santiago de Chile: CEPAL.

Gago, A. & Labandeira, X. (2012). Un Nuevo Modelo de Reforma Fiscal Verde. Economics of Energy, WP 03/2012. Vigo: Economics of Energy.

Galindo, L.M. & Lorenzo, F. (2020). Desarrollo sostenible y fiscalidad ambiental en América Latina. Documento de Trabajo  $N^{\circ}$  1/2020). Montevideo/Ottawa: Red Sudamericana de Economía Aplicada (REdSUr) e International Development Research Centre (IDRC-Canadá).

Jiménez, J.P. & Podestá, A. (2023). Fiscal revenues from hydrocarbons and minerals in Latin America: challenges in an era of unpredecented decarbonization and growing digitalization. In P. Fehiling and H.J. Burchardt (Eds.), *Taxation and inequality in Latin America: new perspectives on political economy and tax regimes*. Abingdon: Routledge.

Oates, W.E. (2001). A reconsideration of Environmental Federalism. Resources for the Future, Discussion Paper dp-01-54. Washington D.C.: Resources for the Future.

OCDE (2017). Environmental Fiscal Reform: progress, prospects and pitfalls. OECD Report for the G7 Environment Ministers. Paris: OECD.

OECD Stat (n.d.). Policy Instrument Database. OECD. https://www.oecd.org/environment/indicators-modellingoutlooks/policy-instrument-database/.

Parry, I. (2020). Increasing carbon pricing in the EU: Evaluating the options. *European Economic Review*, 121, 103341. <u>https://doi.org/10.1016/j.euroecorev.2019.103341</u>.

Pigou, A.C. (1920). The economics of welfare. London: Macmillan.

Ruiz-Huerta Carbonell, J. et al. (2022). *Libro Blanco sobre la reforma tributaria, Comité de personas expertas para elaborar el Libro Blanco sobre la reforma tributaria*. Madrid: Secretaría de Estado de Hacienda.

Somanathan, E. et al. (2014). National and Sub-national Policies and Institutions. In O. Edenhofer et al. (Eds.), *Climate Change* 2014: *Mitigation of Climate Change. IPCC Working Group III Contribution to AR5* (pp. 1141-1205). Cambridge: Cambridge University Press.

Tanzi, V. (2022). *Fragile Futures: The Uncertain Economics of Disasters, Pandemics, and Climate Change*. Cambridge: Cambridge University Press.

UE (2001). *Environmental Taxes. A statistical guide*. Luxembourg: Office for Official Publications of the European Communities.

# EXTRACTIVISM

## The Project

The collaborative research project *extractivism.de* links the Universities of Kassel and Marburg. The project scrutinizes the extractivist development model and proposes new economic, political, and sociological conceptions of extractivism. It preliminarily focuses on Latin America and the Maghreb patterns. The project researches the conditions under which these patterns affect the persistence and transformative capacity of extractivism and its respective institutional settings. Finally, it explores how extractivism affects cultural processes and habitual routines and questions under what conditions and how far the development model extends into institution-building and social practice, i.e., everyday life.

The project aims to understand extractive societies not as deviants from the Western trajectory of development but in their own logic and their own particularities. The project, therefore, combines a strong empirical focus with theoretical work. It links both broad field research and data gathering of primary data and the qualitative and quantitative analysis of available secondary sources with a stringent transregional comparison. It develops methods in cross-area studies and investigates whether and why similar patterns of social change emerge in different areas and world regions despite significant cultural, social, or religious differences. Finally, the project intends to translate the findings for politics, society, and development cooperation.

Please visit <u>www.extractivism.de</u> for further information.

GEFÖRDERT VOM



U N I K A S S E L V E R S I T 'A' T

