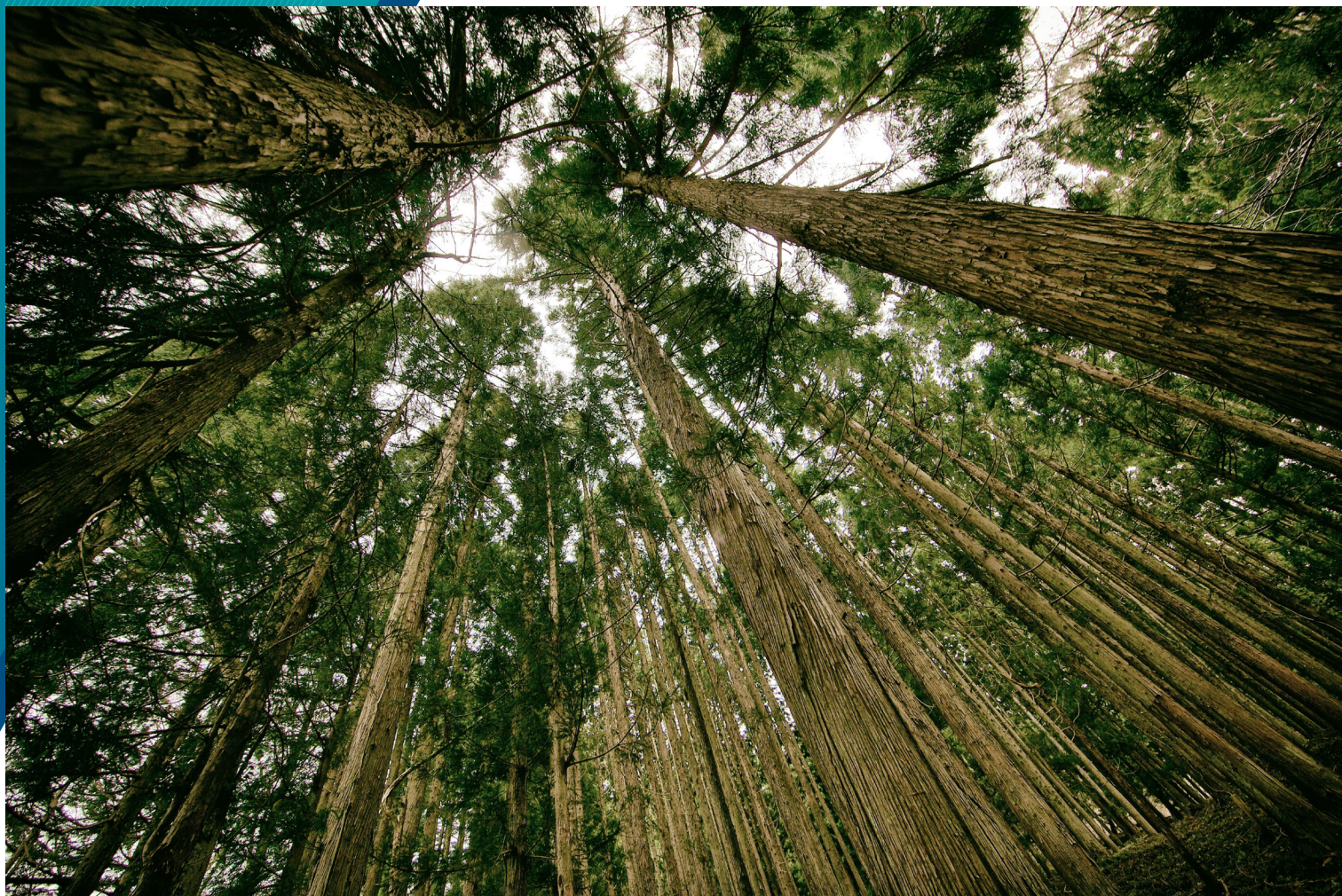


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Policy Brief on Trade and Environmental Policy



**KONRAD
ADENAUER
STIFTUNG**



Economy, markets and the environment: A look from Latin America

Samín Vargas and Carlos Trinidad

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List of abbreviations

CDB	Convention on Biological Diversity
ETS	Emission Trading Scheme
GEF	Global Environment Facility
GHG	Greenhouse Gases
IEPDT	Impuesto Extraordinario de Promoción y Desarrollo Turístico Nacional
SDGs	Sustainable Development Goals
UNEP	United Nations Environment Programme
UNDP	United Nations Development Programme
PROFONANPE	Fondo Nacional para las Áreas Naturales Protegidas por el Estado
REDD	Reducing Emissions from Deforestation and Forest Degradation
SERNANP	Servicio de Áreas Naturales Protegidas por el Estado
SINAC	Sistema Nacional de Áreas Protegidas de Costa Rica
SPDA	Sociedad Peruana de Derecho Ambiental
SUNAT	Superintendencia Nacional de Administración Tributaria

Introduction

One of the important challenges Latin America faces in its effort to achieve sustainable development is how to reconcile conservation efforts and environmental protection with general economic policies. Although this is not a recent challenge, planning, designing and implementing financial mechanisms, mainly economic incentives, is. These are intended to enable conservation actions and programs, as well as robust and powerful environmental protection. With major differences among countries, mechanisms such as payments for environmental services, reducing emissions from deforestation and forest degradation (REDD), conservation schemes from taxes, carbon markets, diverse incentives from environmental investment, among many others, have started to be implemented to align better incentives and use market forces and the economy to promote conservation and environmental protection. This document features two ideas that are beginning to gain traction in international and regional debates: the application of taxes to finance conservation and carbon valuation to encourage an emerging market and promote a gradual energy transition. Initial regional interest offers a preliminary entry point into how to find synergies and mutual supportiveness between environmental conservation and protection with economic, finance and market policies.

First section: Biodiversity funding

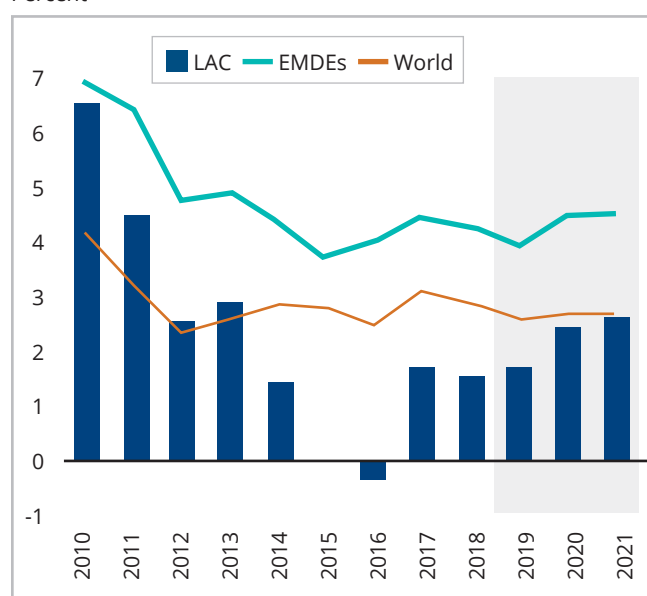
1.1 Biodiversity in the present regional context

Compliance of environmental commitments embodied in the Paris Agreement on Climate Change, the Sustainable Development Goals (SDGs) linked to climate and ecosystems, and the Convention on Biological Diversity (CBD), among others, require the movement of considerable financial resources by the countries in the region in order to undertake adaptation and mitigation projects on climate change, conservation and maintenance and use of biodiversity resources.

Financing projects in the region is complex, especially with public funds. Economic growth in Latin America has been weak during the last two years, and although predictions for the 2020-2021 period indicate a slight recovery, it is significantly lower in magnitude compared to previous years, as shown in the following graphics.

Graph 1:
Real GDP Latin America (%)

Percent



	2016	2017	2018	2019	2020
World	2.8	3.4	3.2	2.8	2.8
United States	1.6	2.4	2.9	2.4	1.7
Euro Area	1.9	2.7	1.9	1.1	1.2
China	6.7	6.8	6.6	6.2	6.0
Japan	0.6	1.9	0.8	0.9	0.5
Latin America	-0.1	1.8	1.5	1.2	2.0
Centam & Caribbean	2.8	2.5	2.4	3.3	3.2
Chile	1.7	1.3	4.0	2.6	3.0
Mexico	2.9	2.1	2.0	0.8	1.5
Mercosur	-2.8	1.5	0.4	0.3	1.6
Argentina	-2.1	2.7	-2.5	-2.8	-1.4
Brazil	-3.3	1.1	1.1	1.0	2.1
Paraguay	4.3	5.0	3.7	2.3	3.6
Uruguay	1.7	2.6	1.6	0.6	1.6
Venezuela	-17.0	-15.7	-19.4	-26.0	-5.1
Andean Com.	2.3	2.0	2.9	2.7	2.9
Bolivia	4.3	4.2	4.2	4.0	3.7
Colombia	2.1	1.4	2.6	3.1	3.2
Ecuador	-1.2	2.4	1.4	0.0	0.5
Peru	4.1	2.5	4.0	3.0	3.5

Sources: Latin America and the Caribbean. Global Economic Prospects June 2019; Latin Focus Consensus Forecast. September 2019. Focus Economics.

Several external risks may undermine the regional growth rate, including global growth, intensification of trade disputes between United States and China, loss of confidence by foreign investors in the region, the Venezuela and Argentine crisis and growing tensions in Chile, Ecuador and Bolivia.¹ On the other hand, slower economic growth generates less income to finance government expenditures in the countries of the region. Most of the economies present a negative fiscal balance and current account deficits. The scenario is not much different for the years to come, and similar levels to previous years are projected.²

Graph 2:

Fiscal Balance and Current Accounts in Latin America (%)

	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
World	2.8	3.4	3.2	2.8	2.8	0.0	0.0	0.0	0.0	0.0
United States	1.6	2.4	2.9	2.4	1.7	2.3	2.3	2.4	2.5	2.5
Euro Area	1.9	2.7	1.9	1.1	1.2	3.1	3.2	2.9	2.8	2.4
China	6.7	6.8	6.6	6.2	6.0	1.8	1.6	0.4	0.4	0.2
Japan	0.6	1.9	0.8	0.9	0.5	4.0	4.9	3.5	3.3	3.2
Latin America	-0.1	1.8	1.5	1.2	2.0	-1.7	-1.4	-1.8	-1.4	-1.4
Centam & Caribbean	2.8	2.5	2.4	3.3	3.2	0.1	0.3	-0.3	0.7	1.1
Chile	1.7	1.3	4.0	2.6	3.0	1.6	2.1	3.1	3.1	2.8
Mexico	2.9	2.1	2.0	0.8	1.5	-2.3	-1.7	-1.8	-1.3	-1.6
Mercosur	-2.8	1.5	0.4	0.3	1.6	-1.5	-1.3	-1.7	-1.1	-1.3
Argentina	-2.1	2.7	-2.5	-2.8	-1.4	-2.7	-4.9	-5.1	-1.7	-0.8
Brazil	-3.3	1.1	1.1	1.0	2.1	1.3	0.1	0.8	1.0	1.1
Paraguay	4.3	5.0	3.7	2.3	3.6	3.6	3.1	0.5	-0.4	0.7
Uruguay	1.7	2.6	1.6	0.6	1.6	0.6	0.8	0.6	0.7	1.0
Venezuela	-17.0	-15.7	-19.4	-26.0	-5.1	-0.4	6.1	4.7	3.4	0.9
Andean Com.	2.3	2.0	2.9	2.7	2.9	-2.9	-2.3	-2.9	-2.9	-2.8
Bolivia	4.3	4.2	4.2	4.0	3.7	5.5	1.8	1.8	5.0	1.7
Colombia	2.1	1.4	2.6	3.1	3.2	-4.3	-3.3	-3.9	-4.7	-4.0
Ecuador	-1.2	2.4	1.4	0.0	0.5	1.3	0.5	1.1	0.7	0.1
Peru	4.1	2.5	4.0	3.0	3.5	-2.6	-1.2	-1.6	-1.8	-1.9

Source: Latin America and the Caribbean. Global Economic Prospects June 2019.

Therefore, in aggregate terms, the level of income generated by regional economies appears in terms of financing compliance of supranational environmental commitments and actions linked to biodiversity and climate.

Nevertheless, at the sectorial level, the “green” (environmental) issue in the region has received resources from a number of international bodies, cooperation agencies and development banks over the years. Furthermore, actions linked to climate and biodiversity are still a priority on the international agenda, therefore the options of continuity in the mobilization of resources for these issues will probably continue in the short and long term. Financing for projects and actions include organizations such as the Climate Change Adaptation Fund (United Nations), the Global Environmental Facility GEF (UNDP, UNEP and World Bank), the Green Climate Fund –GCF (United Nations), among others.

A greater level of mobilization is required in order for countries to reach the goals established, but given the fiscal situation identified above, it becomes complex to make a larger public budget available for projects linked to biodiversity and climate. Other government sectors are also competing with the environmental sector for a larger allocation of financial resources. This is especially challenging in countries such as Venezuela, Argentina, and more recently in Chile, Ecuador, and Bolivia, where pending social goals need to be reached and have generated high social tensions and conflict.³

However, it is important to note that climate and biodiversity are issues that include the use and exploitation of natural resources, and are closely linked to various economic activities that generate income, with a high probability to ensure a greater allocation of public resources by governments, despite the fiscal situation described.

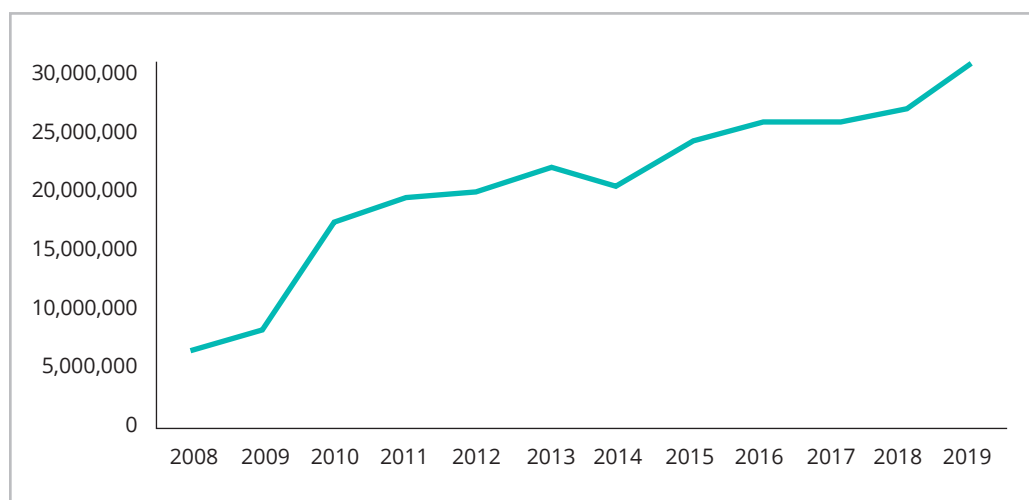
Proof of this are the different initiatives for financial sustainability of protected natural areas

encouraged by some countries in the region such as Costa Rica, Colombia and Peru, that are strongly supported by their governments.⁴ Costa Rica established a Forever Costa Rica Program (2010), aimed to comply with country goals under the framework of the CBD. It is managed by the Forever Costa Rica Association, a private environmental fund that channels resources from donors (international organizations and private foundations) in order to finance marine and land conservation spaces in perpetuity of the National System of Conservation Areas (SINAC, in Spanish).⁵

Colombia established Heritage Colombia (2015), a program to protect the National System of Protected Areas (SINAP, in Spanish) with great political support by the Government, to such an extent that it is one of the first countries in the world to create a carbon tax, assigning an additional 5% of the resources produced by this instrument to permanently finance the conservation of their natural protected areas.⁶

This year Peru declared the Financial Sustainability Initiative for Protected Natural Areas of SINANPE of national interest, named Securing the Future of Peru's Protected Natural Areas, to mobilize and capture resources from various public and private allies in favor of SINANPEs biodiversity conservation, use and exploitation.⁷ It is also important to mention that since the creation of the National System of Protected Natural Areas by the State (SERNANP), responsible for SINANPE, increased resources from the public budget have been made available, having registered an average annual growth rate of 18%.

Graph 3:
SERNANP Budget 2008-2019 in American Dollars



Source: Friendly consultation: Ministry of Economy and Finance (Peru).

1.2 High impact financial mechanisms for conservation

Although climate and biodiversity are on government's agendas and efforts are being undertaken to improve the mobilization of resources, this is insufficient to comply with the financial requirements necessary to meet the environmental objectives. The complex Paris Accord process and the post 2020 agenda for biodiversity which will be approved in COP 15 in Kuoming, China and will determine new efforts for conservation, are two pillars in the road to find resources to implement a wide range of environmental agreements. Common but different responsibilities by countries, are at the core of the responsibilities and compromises to mobilize resources towards adaptation, mitigation and biodiversity conservation.

Additional incomes for the economies need to be generated, and with market-based instruments such as equity investments, user fees, taxes, among others, significant resources can be mobilized. The mobilization of resources is a priority in international discussions in the scope of the CBD and post 2020 biodiversity agenda, and the Biodiversity Regional Cooperation Program as a result of the Ministers Declaration on Environment (2017). Some countries in the region are working with these types of mechanisms such as the Impact Investment Catalyzing Program in Costa Rica, the market for carbon transaction rights in Mexico, tax on the use of fossil fuels in Colombia, among others.

Brief case study: proposal of the Extraordinary Tax on the Promotion and Development of National Tourism (IEPDT, in Spanish) to finance conservation in Peru

The Director Plan of Protected Natural Areas in Peru emphasizes that tourism is a means to achieve primary goals for conservation, recreation and education, and to promote the sustainable development of local populations. Over the past few years, SERNANP has been working articulately with different actors to promote tourism in the areas, becoming a key strategy for the conservation and development of local economies.

Growth perspectives for this activity in protected natural areas are very favorable. SERNANP mentions that a sustainable growth was registered in the number of visitors at SINANPE during the 2009-2017 period; 50% of the residents in Peru select a destination due to its landscape and nature; 60% of foreign tourists undertake nature activities; and there is a sensitized demand in terms of the value of biodiversity. As a result of increased numbers of visitors, the resources raised by SERNANP have increased during the 2009-2018 period. The SINANPE Financial Plan 2016-2015 indicates that 85% of the resources originate from fees charged to enter the areas.⁸

Based on these considerations, Peru is working on a financial mechanism linked to tourism, such as a proposal to increase the amount of the extraordinary tax on the promotion and development of national tourism from 15 US Dollars to 20 US Dollars, seeking to generate additional resources in favor of the National System of Protected Natural Areas by the State (SINANPE, in Spanish).⁹

The IEPDT imposes a tax on the entrance to national territory of natural persons that use international air transportation companies, that is consigned on the airline ticket. The air transportation companies for international traffic are the agents in charge of imposing the tax and must declare and pay taxes every month to the National Superintendency of Tax Administration (SUNAT, in Spanish), the Government agency in charge of tax-collecting and administrating the IEPDT.¹⁰ According to projections, the proposal to increase the amount of tax would generate additional resources estimated at 18 million US Dollars that would help cover the financial needs of SINANPE investments that amount to 128 million US Dollars, to potentiate protected natural areas as tourist products.¹¹

The economic viability analysis notes in the first place that increasing the IEPDT amount would not affect the competitiveness of tourism and aeronautics sectors; this tax represents a minimum percentage in terms of all charges, taxes and fees affecting the price of international airline tickets. There is considerable demand to increase the tax to 46 US Dollars. Secondly, investments in protected natural areas will generate positive impacts on well-being indicators. The impact assessment study concludes that the rate of chronic malnutrition among children and the poverty rate would decrease by 2.02% and 4.05% respectively. Furthermore, there would be an increase at the level of individual incomes for people settled in protected areas, from the assurance of provisions from ecosystem services that sustain the local economy. Thirdly, the risk cost-benefit analysis determined that the proposal to increase IEPDT would be cost-effective for the country and that benefits from tourism in protected areas and higher incomes for families settled in these areas would exceed investment costs and other costs linked to promoting the areas, resulting in an expected NPV of S/. 358 million with practically a nil probability of being negative.

Second section: Determining prices for carbon in Latin America: energy transition and fiscal policies

2.1 A price on carbon: some preliminary ideas

Establishing a price on carbon is one of the climate policy options that has been gaining preponderance among the arsenal of instruments used by countries to mitigate the effects of climate change. According to the World Bank, between 2018 and 2019, 57 countries have incorporated a price on carbon in their legislations or have a time limit to do so (World Bank 2019a).

The price on carbon is defined as an instrument that captures the external costs of greenhouse gas emissions (GGE), and links them to their sources generally as a price on the carbon dioxide (CO₂) emitted (World Bank, 2018). A number of techniques have been adopted throughout the world to introduce a price on carbon. However, two of the most explored instruments by various national policies are carbon emission taxes and schemes to set limits and emissions trading,¹² also denominated “cap and trade”. Nevertheless, there are other instruments that may be included in this broad definition, such as fictitious prices in the financial instruments¹³ or economic incentives (High-Level Commission on Carbon Price, 2017).

Box 1

Types of carbon pricing

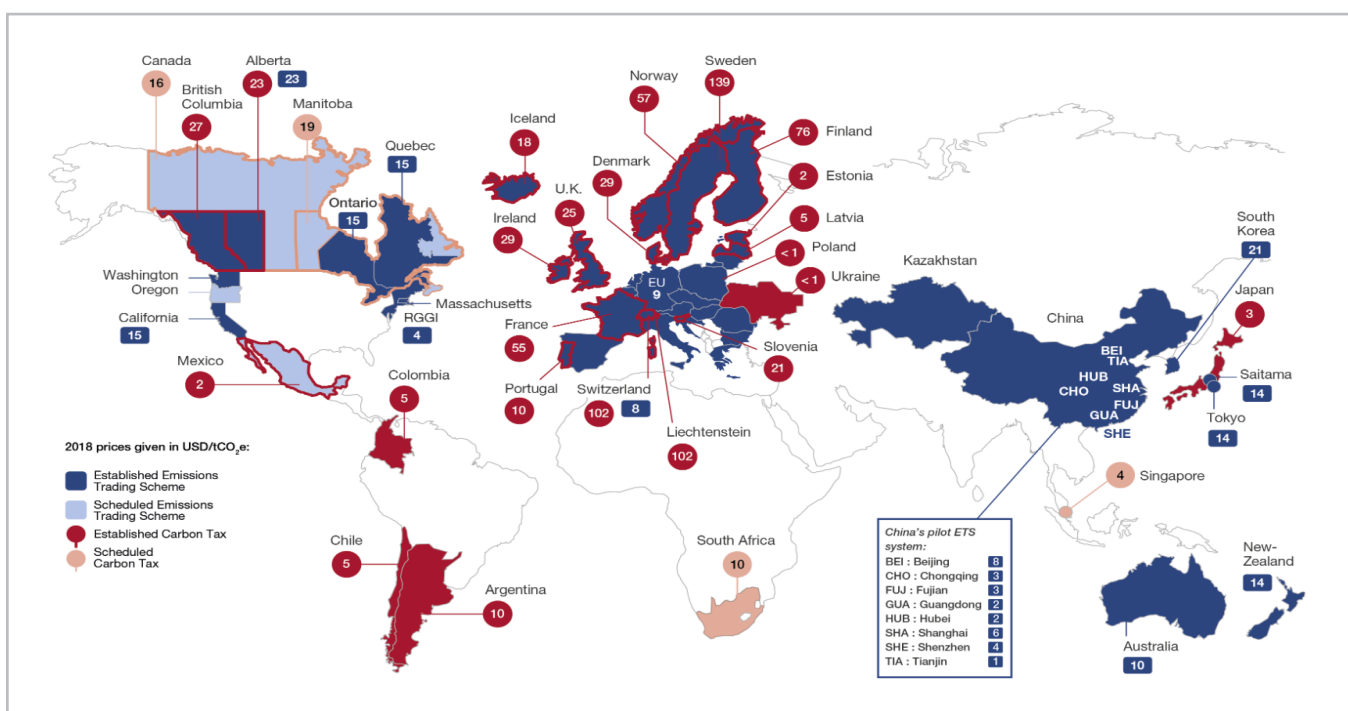
- A. Carbon taxes:** fixes by means of an explicit tax rate a price on greenhouse gas emissions or most commonly on the carbon content of fossil fuel, namely, a price for CO₂.
- B. Emissions Trading System (ETS):** the emitters can exchange emissions units within an established market.
- C. Compensation mechanism:** the designation of greenhouse gas emissions (GGE) of activities based on projects/programs that can be transferred at the national level or in other countries.
- D. Results-Based Climate Financing (RBCF):** an approach to financing under which funds are disbursed upon the achievement and independent verification of a pre-agreed set of results related to climate change management.
- E. Internal carbon pricing:** private organizations voluntarily use carbon pricing to guide their decision-making processes with regard to climate change impacts, risks and opportunities

Source: World Bank, 2019a.

Between 2018 and 2019, 28 countries have fixed a carbon price by means of taxes. It should be noted that there is a significant difference between traditional energy taxes and prices on greenhouse gas emissions. The first were created for fiscal collection reasons, and only indirectly help to encourage adequate performance from an environmental point of view (Fanelli et al., 2015, p. 46), that can be noticed, particularly, in the taxation technique: the relationship between the tax value and unit emission is indirect, as the criteria for tax policy is a priority. Conversely, carbon taxes are a predominantly environmental chargeable event, as GEG emissions are taxed through the assignation of an explicit monetary value.

Image 1

Map of explicit carbon prices across the globe



Source and elaboration: I4CE - Institute for Climate Economics with data from ICAP, World Bank, government officials and public information, April 2018.
Link: https://www.i4ce.org/wp-core/wp-content/uploads/2018/04/Global-Carbon-Account-2018_5p-1.pdf

Carbon price fixing policies could be effective to reduce GGE for a number of reasons. In first place, they reveal environmental costs and internalize them in the structure of fossil fuel prices, sending a clear market signal for consumers to mobilize their preferences towards low carbon energies and companies to invest in innovation, clean technologies and energetic efficiency (Aiello et al., 2018, p. 44). It may also have compensatory and distributive effects, when combined with redistributive policies (such as the reduction of regressive taxes or to salaries) or finance direct conditional transfer programs (Vogt-Schilb et al., 2019, p. 7), reaching climate purposes, by mobilizing resources to finance adaptation actions, programs for rural access to alternative energy sources or public investment in natural infrastructure.

Global revenues from carbon price fixing policies have amounted to 44 billion US Dollars only in 2018. However, the scope of these policies is still insufficient, as less than 5% of global emissions covered by carbon price fixing policies have a consistent price with the Paris Agreement objectives, namely, between 40 USD and 80 USD per ton of CO₂ by 2020 and between 50 USD and 100 USD per ton of CO₂ by 2030 (World Bank, 2019, pp. 9 and 10). In this

regard, it is hardly surprising that the High Level Commission on Carbon Prices has suggested that carbon price fixing is complemented with other policies adequately designed to address a number of market and Government deficiencies, such as urban planning policies, promotion of renewable energy in the electricity sector or forest management (High-Level Commission on Carbon Prices 2017, 2017, p.31).

2.2 Carbon prices in developing countries

According to the World Bank, at present there are 119 emerging markets with developing economies (excluding low income countries) (2019a, p. 414). Out of these, 18 countries have already implemented or formally programmed a carbon fixed price (The World Bank, 2019b, p.9).¹⁴

There is the presumption that as a consequence of a fixed price on carbon emissions, energy prices rise and slow down economic development, mainly for the poorest segments of society (Jakob & Steckel, 2014, p.164 and Arze *et al.*, 2019, p.2234). Therefore, in the case of developing countries, a possible reform of carbon prices must assess the potential impacts from an increase of fuel prices short term, considering the impact of such an increase on the basic family basket, as well as implications in the competitiveness of diverse economic sectors (Trinidad and Ortiz, 2019, p.29). Nevertheless, some studies indicate that a carbon price in developing countries may be more effective than maintaining fuel subsidies and low artificial prices on energy, mainly, for the poorest segments (Vogt-Schilb & Hallegatte, 2017, p.6).

A carbon price may be particularly beneficial for developing countries due to the following reasons: (i) it may generate distributive results, by enabling the implementation of progressive policies such as regressive tax reductions or wage taxes (Stern, 2011 in Jakob, 2017, p.2), (ii) it may help reduce formality rates, by focusing on a formal tax base, like the industries and transport, and above all, by incorporating a price signal on energy use during the first stages of the production chain, it is much harder to evade than income tax or labor force, as informal activities would pay an energy price with the value of negative externalities already incorporated (Markandya, González-Eguino, and Escapa 2013, p.110), (iii) carbon taxes are generally simple to administrate as they use the institutional infrastructure of fuel taxes, that the majority of countries already collect (Parry, 2019, 54), and (iv) incomes from the elimination of fossil fuel subsidies or the introduction of carbon prices would generate income that could be used to promote human development (Jakob *et al.*, 2015, p.711).

However, a carbon price should be applied progressively in the case of developing countries, as lower income populations are more involved in spending on goods and energy services not necessarily decarbonized (Dorband *et al.*, 2018, p. 247). Furthermore, the implementation of such a measure must take place keeping in mind the political factors, such as the continuous and complete information on the benefits of a carbon price (Hsu *et al.*, 2008, p.3618).

Additionally, compensation mechanisms should be provided for sectors of the population mostly affected by an increase in the price of energy. For example, a recent investigation refers to incomes generated by a carbon tax may be used to finance money transfer social programs, and thereby effectively mitigate the potential negative impacts from carbon taxes in poor and vulnerable households (Vogt-Schilb *et al.*, 2019, p.2).

Finally, carbon pricing must be integrated within a more comprehensive vision on energy transition that includes other measures such as the consolidation of a low-carbon energy supply, the elimination of fossil fuels subsidies and the promotion of renewable energies.

2.3 Carbon prices in Latin America

The majority of countries in Latin America is lacking a price on carbon or even incorporates negative prices through diverse fossil fuel subsidies (The World Bank, Ecofys and Vivid Economics 2017). However, during the past 5 years, Chile, Argentina, Colombia and Mexico have incorporated explicit prices on carbon in their legislations.

Box 2

Carbon taxes in Latin America

Countries	Tax rate	Year in force
Argentina	US\$6/tCO ₂ e	2018
Chile	US\$5/tCO ₂ e	2017
Colombia	US\$5/tCO ₂ e	2017
Mexico	Maximum: US\$3/tCO ₂ e	
	Minimum: US\$0.37/tCO ₂ e	2014

Source: Carbon Pricing Dashboard, World Bank, own elaboration.

In spite of evident connections, country reforms present differences among each other. For example, Chile is the only country that has implemented a green tax reform characterized by the creation of an innovative *downstream* tax. To this effect, they implemented a solid institutional infrastructure for mediation, reporting and verification of emissions (Pizarro and Pinto, 2019, p.192). Other countries such as Chile, Mexico and Argentina have maintained the structure of traditional *upstream* taxes or taxes at the level of the producer, contemplating innovative payment options that would allow the link of a carbon tax with carbon markets and “cap and trade” schemes, like Mexico, or are “flexible” as they allow tax payments through *offset* compensations like Colombia.

Brief case study: the limitations of classic taxes on fuels to promote a low carbon energy transition in Peru

In the region, specific taxes on fuels have been established for tax collection reasons and only in recent years, have environmental criteria been incorporated (Fanelli, et al., 2015, p.46). In the case of Peru, under Law 26894 of 2006, environmental criteria were included in the Selective Consumption Tax (ISC, in Spanish): ISC rates applicable to fuels shall be determined progressively based on a “hazard index”, therefore the most contaminant fuels would pay higher ISC rates, internalizing the social cost they represent and this way, operate as a disincentive for producers and final users. This same reform established that as from 2016, all fuel taxes must fully consider the hazard criteria.

Although this reform tunes in with international trends to use market instruments in order to face environmental problems, it would have had a limited effect to mobilize the energy demands of users and producers towards low carbon goods and services. As indicated by Trinidad and Ortiz (2019, p.299), the reasons that would explain the limited effectiveness of these reforms include:

- **The collective nature of the ISC:** 2006 reforms did not modify the structure of taxes but only aligned the fixing of ISC rates to environmental criteria. Despite the reforms, consumption and not the emissions continue to be taxed with the ISC, that would make it impossible to include taxing on stationary source emissions.
- **There is no link between the environmental purpose and measuring method of the taxable base:** the formula of the hazard index presents two problems to incorporate the value of externalities in the ISC: firstly, this index includes diverse environmental variables, mainly associated to the damage to health from chemical emissions into the atmosphere. Additionally, there is not a clear methodology on how the ISC incorporates information contained in the hazard index.
- **It does not provide a clear signal to markets:** as an upstream tax only applicable during the first stages of the chain, the ISC is incorporated in the structure of fuel prices in the following stages, and therefore does not provide a clear and unequivocal sign for final consumers on the link of the ISC with the environmental problem.
- **It has not been a consistent policy since its establishment:** with the hazard index in force during more than 10 years, it has not been applied consistently in time. For example, several contaminant fuels (such as carbon and diesel) had lower rates or where exempt to taxing. To date, the only tax that considers the hazard criteria is the ISC.
- **Presence of energy subsidies:** Currently, Peru presents different energy subsidies oriented to cheapen fossil fuel prices. The return of 53% of the ISC was approved in favor of drivers that provide land transportation at the national level.
- **Lack of an integral energy transition policy:** the establishment of the hazard index for the ISC was not accompanied by an integral energy transition policy, such as gradual substitution policies for fossil fuel subsidies, the promotion of electric automobiles, the decarbonization of public transportation, norms to promote renewable energy markets, among others. Without these enabling conditions, the

harmfulness index would lead to an increase of the ISC but would be ineffective to change consumer preferences.

An additional factor must be added to this: the regulatory model selected by Peru allows for a wide margin of discretion so the ISC rates are approved or modified through norms from the Executive Power (supreme decrees). This explains that the hazard index is not the only criteria to fix the rates of the ISC on fuels, different criteria must be taken into account such as fiscal policies and tax collecting. Although this allows flexibility to apply the tax, it may condition the effectiveness of the environmental criteria of the ISC in the political situation.

Additionally, strengthening the development of a regional carbon market has also been encouraged. In 2017, two regional policy milestones on carbon pricing: (i) member countries of the Pacific Alliance signed the Cali Declaration where they committed to intensifying their efforts regarding mediation, report and verification of CO₂ emissions and other greenhouse gas emissions, aimed to the identification of possible voluntary market mechanisms in the region,¹⁵ and (ii) several countries in the region signed the Paris Declaration on Carbon Pricing in the Americas that contemplates the commitment to implement carbon price fixing as a central instrument of economic and environmental policy for an ambitious action on climate change.¹⁶

These reforms and initiatives are barely 5 years old. An accurate assessment regarding their effectiveness may be premature. However, projections and preliminary results are encouraging.

Challenges and recommendations

- Biodiversity conservation and fight against the negative effects of climate change are of great importance in a context of economic slowdown and vulnerability in the fiscal accounts of countries in the region. By being linked to the generation of economic activities that generate incomes, the injection of greater resources in green projects will help to regain the path of economic growth in the region and reach the targets established in the principal international commitments in terms of biodiversity and climate.
- A strong trend in the region exists to encourage the implementation of market mechanisms in terms of generating additional resources that would help to meet the financial needs for conservation and maintenance of natural ecosystems.
- The proposal to increase the amount of IEPDT in Peru represents the highest impact financial mechanism in terms of generating additional resources for SINANPE and will help to finance the gap in investments for the conservation of protected natural areas, offering a number of economic, social and environmental benefits.
- In this regard, similar taxes could be established in the region to generate new resources that cover the financial requirements of investments in natural protected areas. The magnitude is significant to be financed only with the public budget that is very exposed to the economic performance and used mainly to finance current expenditure.
- Likewise, it is important to mention that the taxes must be established at a level that would not affect the competitiveness of economic sectors related to tax collecting, and show the quantitative data of the economic and social benefits they provide to the country's economy.
- Several challenges persist in the region to implement these types of climate mechanisms, such as aligning customs and commercial integration policies with carbon prices, promoting trade systems on regional emissions or carbon border adjustments (ONU, 2018, p.47 and Cotrell and Falcão, 2018, p.73).
- The limitations (and opportunities) from carbon pricing in countries where the predominance of emissions is focused on the conversion of forests, and where deforestation also poses important challenges, including how to integrate these reforms with broader policies that include links with energy security, human development and social inclusion policies should be pondered carefully.
- Carbon price fixing in Latin America has to deal with the structural problems of the region, such as high rates of informality, low fiscal pressure, institutional weakness of the environmental agency and the incursion of energetic subsidies in regional economies.
- The integration of economic thought and the logic of the incentives and market strategies, countries norms and policies in general, are still at an early stage regardless of the advances by some countries.

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- 1 Latin American Economic Outlook 2019. Development in Transition, (CEPAL, CAF).
- 2 It must be noted that countries present different fiscal ranges; Chile and Peru have a higher margin to finance their growth with higher debt levels (ratio debt/GDP does not exceed 30% in both countries).
- 3 Some economic studies suggest that the countries in the region are engulfed in the poverty trap, a situation in which countries in economic contraction have a high probability of not recovering initial growth levels, and would find it difficult to reach greater well being. By contrast, the vicious circle of lower economic growth and poverty increase persists.
- 4 Peru is another country that has these types of initiative through the Amazon Region Protected Areas Program (ARPA, in Spanish).
- 5 Annual Work Report 2017-2018. Forever Costa Rica Association.
- 6 "Out of the 100% tax for fossil fuel and natural gas payments, 25% is assigned to the Ministry of Environment and Sustainable Development for environmental activities related to coastal erosion, reduction of deforestation, conservation of water sources, conservation of strategic ecosystems and climate change; 5% for Herencia Colombia and the remaining 70% to the Fondo Colombia Sostenible". Source: <http://www.minambiente.gov.co/index.php/noticias/3454-nace-herencia-colombia-el-programa-para-proteger-nuestro-capital-natural-para-siempre>
- 7 Approved by Supreme Decree 003-2019-MINAM (03/04/2019). Efforts for the implementation of this initiative have been carried out since 2014 among diverse public (SERNANP, MINAM) and private (Gordon and Betty Moore Foundation, PROFONANPE, SPDA, WWF) actors.
- 8 Emission Trading Scheme (ETS).
- 9 Iso denominated shadow price.
- 10 Argentina; Brazil; Chile; China; Colombia; Bulgaria; Ivory Coast; Croatia; Hungary; Kazakhstan; México; Poland; Rumania; South Africa; Thailand; Turkey; Ukraine and Vietnam
- 11 See: <https://alianzapacifico.net/download/declaracion-de-cali-junio-30-de-2017/>
- 12 Countries that signed this declaration were: Chile, Colombia, Mexico, Costa Rica, Canada and California States, Washington, Alberta, British Columbia, Nova Scotia, Ontario and Quebec. More information on the declaration at: http://www.ieta.org/resources/News/Press_Releases/2017/Declaration%20on%20Carbon%20Pricing_FINAL.pdf.

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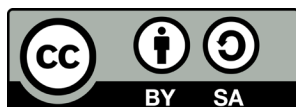
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