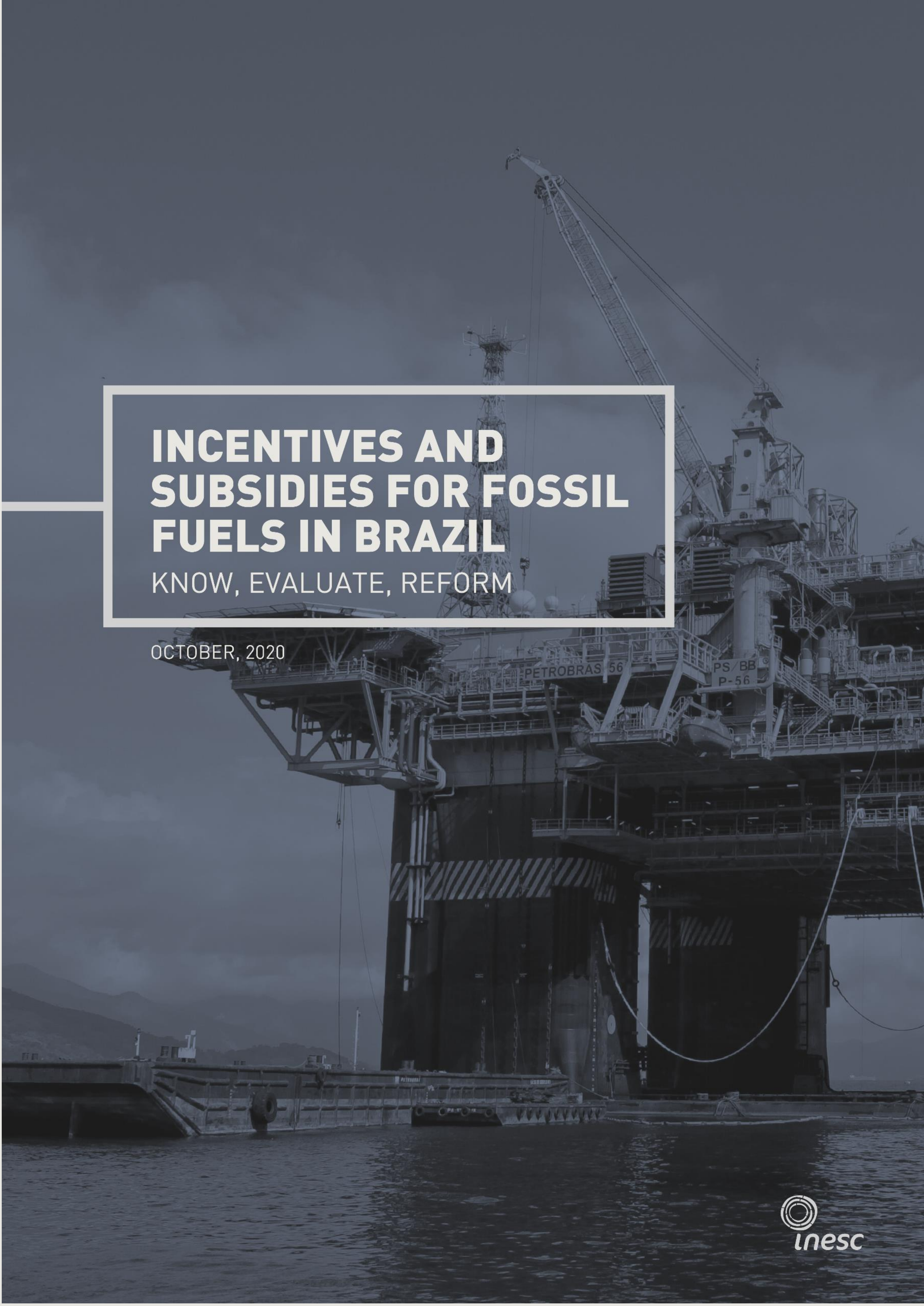

INCENTIVES AND SUBSIDIES FOR FOSSIL FUELS IN BRAZIL

KNOW, EVALUATE, REFORM

OCTOBER, 2020

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SUMMARY

INTRODUCTION

In order to encourage a wide public debate about fossil fuel incentives and subsidies in Brazil, Inesc launches the third edition of the study entitled "Know, Evaluate, Reform". This study gathers a set of publicly available and unpublished data on the main categories of said incentives for the year 2019 and for the 2015 to 2019 period.

Inesc recognizes that the challenge of measuring and reforming incentives to fossil fuels is colossal, going beyond methodological difficulties, technical content, and lack of transparency by governments and constituting a problem at national level.

The topic is now of global importance, especially on the climate agenda. The burning of oil, gas, and coal - which account for more than 80% of the global use of primary energy - is the main source of greenhouse gases that drive global warming. In this context, reforming subsidies becomes a strategic path to discourage the growth of production and consumption and detach growth from the use of fossil fuels.

In a context of multilateral confrontation with the issue, Brazil made the commitment to reform these subsidies, as a member of the G20. According to estimates by the Organization for Economic Cooperation and Development (OECD) and the International Energy Agency (IEA), combined subsidies for consumption and production in 2019 came to US$ 478 billion in 77 economies[1]. It is worth mentioning that in IEA estimates, Brazilian consumption subsidies are not counted, on the grounds that Brazil is not a member of the OECD.

The key issue to be noted here is that the Brazilian problem of fossil subsidies, although associated with the tax systems and other tax, credit and financial incentives of each country, is currently part of a global problem. Thus, domestic mitigation efforts, like a subsidy reform, must be placed in a global context where economies are inextricably linked to international trade flows and to final domestic demand, also on a global scale.

Building a wide discussion about the topic in Brazil - given its broad connections with political, economic, social, environmental and climate issues that impact life on Earth and society in general - is essential to move towards the elimination of many incentives, benefits and subsidies to fossil fuels.

[1] In this regard, please see: https://phys.org/news/2020-06-fossil-fuel-subsidies-bn-oecdiea.html

In general terms, from the perspective of the benefited company or sector, incentives and subsidies represent a reduction in its production or distribution costs. They can take different forms. For example, incentives and subsidies can take place by means of exemption, remission, and reduction of the basis for calculating taxes or contributions. They can also be represented by direct expenditures by the government to support the sector's development, in the form of financing with conditions different from those observed in the market or, in the case of state-owned companies, there may be subsidies in the form of investments via the budget allocated to them.

From a government perspective, in theory, subsidies are justified as community benefits. For example, as business growth that reverts to more jobs and income, or as development of a geographical region or sector, segment and/or technology considered strategical for the country. Furthermore, to support the argument in favor of incentives and subsidies, there is a recurring hypothesis that greater investments would not be achieved without them.

From the consumer's perspective, subsidies are generally justified as promoters of equal living conditions between populations, groups or regions, or even for sustaining prices that are considered essential from the point of view of families or the economy, desirably from both.

Therefore, incentives and subsidies are not necessarily good, bad, or neutral, which is why their evaluation is extraordinarily complex. A good example is the Tax Exemption on Industrialized Products (IPI) for new cars. This measure, in theory, benefited consumers and producers who had their purchases and sales increased. However, it worsened mobility conditions in cities, increased CO_2 emissions and removed resources from education, since the IPI makes up part of the funding for such policies.

Measuring, reforming and even eliminating such incentives targeting fossil fuels is, therefore, a challenge as complex as it is urgent. First, due to the Brazilian situation of economic and fiscal crisis and the need to finance public policies. Second, due to the climate issue and the energy transition, which constitutes a pressing and global issue.

With this publication, we continue the work started in 2018 and continue to defend the urgency of knowing, evaluating and reforming incentives and subsidies to fossil fuels in Brazil.

This paper is organized in four sections. In the first part, the main methodological choices are described, which are still in line with the study launched in 2018. In the second part, the numbers for 2019 are analyzed and interpreted in terms of general behavior of the analysis categories (tax expenditures, other waivers, direct expenditures) and modalities (consumption subsidies and production subsidies). In the third part, the main highlights for the 2019 numbers are presented. The fourth section presents a retrospective view of grants over the past five years. Finally, the fifth part presents questions that Inesc considers central in the public debate on the topic.

Inesc thanks the Institute for Climate and Society (ICS) for the support given to this initiative.

Technical responsibility for the study: Alessandra Cardoso, Cássia Lopes, Cleo Manhas, Livi Gerbase, Thais Virga.

METHODOLOGY

Defining fossil fuel subsidies and incentives is a complex challenge, not only in Brazil, but worldwide. There is no single and standardized concept in international terms, there are different measurement approaches and, moreover, countries have different tax systems and reference standards to measure deviations from their systems.

As in the two previous editions[2], this study has as its starting point the methodology developed by the Overseas Development Institute (ODI) - in partnership with Oil Change International (OCI)[3] and applied to G20 countries. However, a few characterizations were adapted to the Brazilian reality. These methodologies, in turn, are used and adapted with internationally constructed concepts, especially based on the World Trade Organization (WTO) and OECD, these being:

The WTO considers the occurrence of subsidies, in general terms, when there is a financial contribution by a government or public agency within a territory by, for example:

- Direct transfers of funds or bonds (via loans, safeguards and/or capital contributions);
- When due public revenues are forgiven or are no longer collected (tax incentives, benefits, and subsidies);
- Supply or acquisition of goods or services in addition to those intended for general infrastructure;
- Payments to a fund system;
- When a public body entrusts or instructs a private body to perform one or more of the functions described in the previous items, which would normally be the government's responsibility.
- When there is any form of revenue or price support in the sense of Article XVI of the "General Agreement on Tariffs and Trade - GATT" (1994) and, with that, an advantage is conferred.

The OECD categorizes fossil fuel subsidies as:

- Tax expenditures: they provide benefits or preferences (i.e., renouncements, waivers, exemptions, deductions, deferrals, alteration of rates, modification of the calculation basis) for the production or consumption of fossil fuels, both in

[2] Which can be consulted at: https://www.inesc.org.br/campanhas/campanha-combustiveis-fosseis/.
[3] In this regard, check: https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9989.pdf.

absolute terms and in relation to other activities or products. In this sense, tax expenditures are relative preferences within a country's tax system, which are measured with reference to a benchmark tax treatment established by that country. In this regard, please check: http://www.oecd.org/site/tadffss/methodology/.

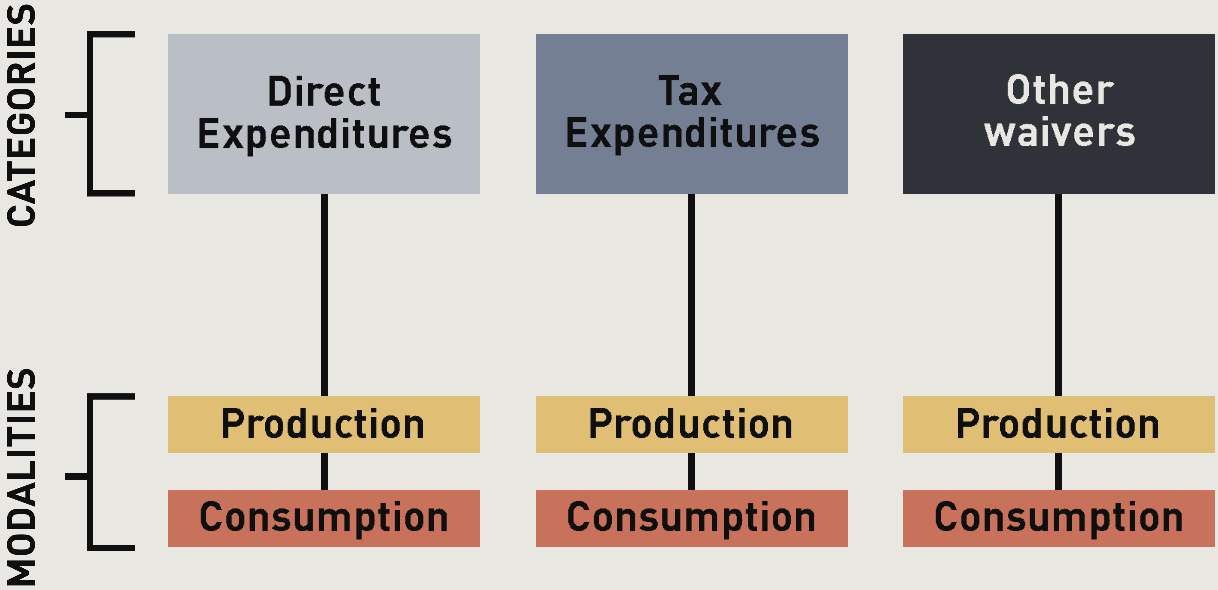
- Direct expenditures: budgetary expenses that benefit the sector, whether in the form of economic subsidies, expenses on R&D, infrastructure, maintenance, among others and in the different stages of the production chain.
- Subsidies granted in the form of Investments and Financing (which were considered in the studies for the Brazilian case – see the 2018 study methodology).

In Brazil, the normative interpretation of the concept of subsidies is more restrictive than international concepts and refers to the direct transfer of resources, from a public to a private entity, as a measure to correct price distortions in the market, to balance competition or stimulate the production and consumption of a certain good. These are "economic subsidies", under the terms of articles 18 and 19 of Law No. 4.320, of March 17, 1964.

Following the commitment to continuously improve the monitoring of subsidies, incentives and waivers related to fossil fuels, in the present study Inesc reinforces and qualifies some of the main conceptual and methodological options for characterizing these incentives, as well as specifying the choices of categories and modalities for analysis.

In summary, Inesc has kept the 2019 methodology, with minor changes that can be found in the Methodological Annex of this study. In this sense, this study adopts the line of interpretation recommended by WTO and uses categories (direct expenditures, tax expenditures) according to OECD concepts that are also adopted by ODI/OIC. Adding to the concepts used by international institutions, however, a methodological option was made to separate tax expenditures from other waivers. This is justified in the Brazilian context because a diversity of Special Regimes and other renouncements are not included in the concept of Tax Expenditures (GT, from Portuguese Gastos Tributários) used by the Brazilian Federal Revenue Authority (RFB).

Inesc's methodology uses three categories and two modalities of analysis regarding the O&G sector, according to the following organization chart and characterizations:



Direct Expenditures

Transfers of public resources to benefit the production sector, for example, public spending on Research and Development (R&D) aimed at the development of technologies, exploratory drilling or investments in infrastructure that directly benefit the sector. Subsidies aimed at reducing the price of fuels are also classified as direct expenditures, such as subsidies to reduce the price of diesel oil.

Tax Expenditures

The "indirect government expenditures made through the tax system, aiming to meet economic and social objectives and constitute an exception to the reference tax system, reducing the potential collection and, consequently, increasing the economic availability of the taxpayer", according to the concept adopted by the Brazilian Federal Revenue Authority.

Other waivers

Exemptions of a general nature, introduced by reducing the tax burden on a sector/segment/economic activity. They are calculated according to the previous tax rule (before the waiver is set) and use the first year of presidential term as a reference.

Production subsidies

Oriented to companies, public or private, in three different phases of the related production chain, and which, in general, have the effect of favoring the sector's profitability.

Upstream

Referring to the search, identification and location of oil sources, in addition to the transportation of extracted oil to refineries for processing, in an activity stage called Exploration and Production (E&P).

Midstream

Where hydrocarbons are transformed into products ready for specific uses (gasoline, diesel, kerosene, LPG, naphtha, lubricating oil), in the "Refining" stage.

Downstream

Referring to logistics, or the transportation of products from the refinery for the distribution and sale of oil products.

Consumption subsidies

Aimed at reducing fuel costs for the consumer, whether for public, private or cargo transportation, or for electricity generation.

Electricity

Transport

Timeline and Currency

The survey was carried out for the period from 2015 to 2019. The values were originally presented in Brazilian reais (current prices) in Brazil. However, in this English version, they are presented in US dollars, and based on yearly average values according to the US Revenue Service (IRS).

The table below presents the subsidies by category, modality, and official data source.

Subsidies for Fossil Fuels by Category, 2019

By category, modality, and official data source

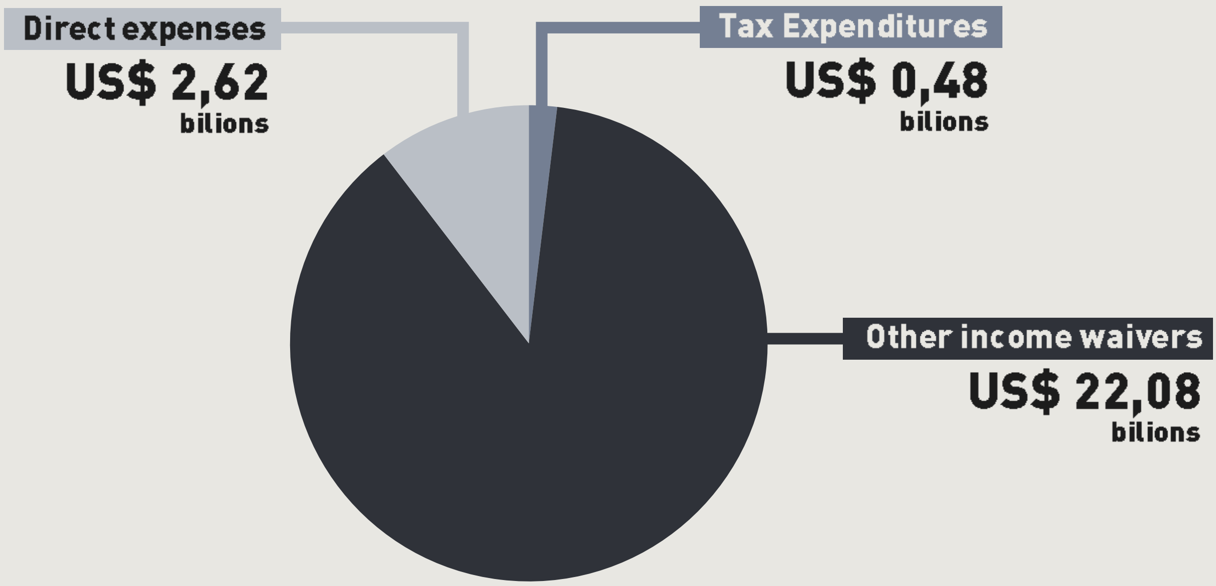
Production **Consumption**

Incentives and Subsidies	Category	Official data source
REPETRO	Other Waivers	Access to Information Law (LAI)
Law No. 13,586 / 2017 (Article 1)		
Cide diesel fuels		National Agency of Petroleum, Natural Gas and Biofuels (ANP)
Cide gasoline fuels		
PIS/Cofins for diesel		
PIS/Cofins for gasoline		
REPENEC: Special Incentive Regime for the Development of Oil Infrastructure in the North, Northeast and Midwest Regions.	Tax Expenditures	Tax Expenditure Estimates (GT), effective basis 2017 (Series 2015 to 2020) published by the Brazilian Federal Revenue Authority (RFB).
REIDI: Special Incentive Scheme for Infrastructure Development (REIDI Energia).		
REPORTO: Special Incentive Regime for the Modernization and Expansion of Port Structure (REPORTO Transporte).		
Thermoelectricity		
Liquefied Natural Gas		
Infrastructure Investments (Energy). *		
Petrochemistry - Industry.		
CCC - Fuel Consumption Account		Aneel
CDE - Energy Development Account		
Geology and geophysics services applied to oil prospecting (action 2050)	Direct Expenses	Extraction of the Siga Brasil Portal, considering financial execution updated by IPCA.
Studies for expansion of the gas pipeline network (action 20LH)		
Support to Institutional Projects for Research in the Oil and Natural Gas Sector (CT-Petro) (action 4156)		
Economic subsidy for trading of diesel in the territory (action 00QU)		
Economic subsidy on the price of diesel (0080)		
00NY - Transfer of Funds to the Energy Development Account (Law 10.438, of April 26, 2002)		

WHAT THE NUMBERS SUGGEST FOR 2019

In 2019, in Brazil, fossil fuel incentives and subsidies totaled US$ 25.08 billion. It is interesting to note that these subsidies are related, respectively, to the categories of other waivers (87.7%), direct expenditures (10.4%) and tax expenditures (1.9%). In terms of modalities, consumption subsidies stand out (approximately 64%). (See Tables 1 and 2).

Fossil Fuels Incentives, by Categories
2019



This value corresponded to 2.7% of Brazil's Gross Domestic Product (GDP) in 2019[4]. In the same year, this was equivalent, for example, to more than 3 years of the Bolsa Família budget (R$ 30 billion in the 2019 budget/US$ 7.6 billion) or more than 29

[4]Based on Brazilian GDP in US dollars (US$ 1.85 billion in 2019), average current values, according to the US Revenue Service (IRS), as well as all amounts in the respective currency.

times the total budget of the Ministry of the Environment (R$ 3.44 billion in the 2019 budget/US$ 861.1 million).

Incentives for Fossil Fuels, by Modalities
2019

Such incentives benefit both producers and consumers. Producers were granted US$ 9.19 billion (which corresponds specifically to 36.5% of the total), particularly through the various Special Tax Regimes for the Oil & Gas sector, the largest of which being Repetro. This regime would expire in 2020 but was renewed until 2040 (Law No. 13.586/2017), after intense public sector dialogues with stakeholders of the oil sector. The regime was not only renewed, but has been expanded and renamed in recent years, assuming two identities - Repetro-Sped and Repetro-Industrialization - regulated, respectively, by Normative Instructions RFB No. 1,880 of 2019 and RFB No. 1.901 of 2019.

In 2019, approximately US$ 16 billion was granted to consumption (corresponding to 63.5% of the total). As part of this amount, the difference between rates related to Pis/Cofins and Cide-Fuels applied to gasoline and diesel and charged in 2019, and those originally approved in the legislation is considered. This budget also includes the entire Fuel Consumption Account (CCC) budget.

The figures are impressive, especially in a context of extremely low growth and the implementation of austerity measures. GDP growth in the year was 1.1% in the Brazilian currency, a rather insignificant growth, given the retractions experienced in 2015 and 2016. The political, economic and social crises in the country deepened in 2019, in parallel with increasing unemployment, as well as the continuous loss in the pace of public and private investments, the latter in restraint due to the dreadful political scenario in the country.

At the same time, fiscal adjustment measures have resulted in general budget cuts, particularly for social and environmental policies with non-mandatory spending.

Additionally, both the scenario of economic crisis and the attack on human rights[5] were amplified. In short, the internal and external scenarios in 2019 reinforced the urgency of deepening the debate on fossil subsidies in Brazil. And all this, before the Covid-19 pandemic and its strong effects on the oil and gas markets, due to the abrupt contraction of circulation worldwide.

In the midst of an economic recession that has entered its sixth year in 2019, tax renouncements[6] as estimated by the Court of Federal Union Accounts (TCU) reached about R$ 348.4 billion (US$ 88.2 billion), corresponding to 4.8% of GDP in 2019, an increase over 2018, when it reached 4.6%. It is worth mentioning that the strong increase in renouncements in the period from 2015 to 2017 proved to be ineffective as an attempt to reverse the recession scenario and deepened the Brazilian fiscal crisis, in addition to compromising the Social Security financing base. As TCU states, regarding the set of tax benefits that directly impact the social security system, renouncements reached R$ 62.1 billion (US$ 8.13 billion) in 2019.

However, there are billions in resources from other renouncements for large companies and consumers that are not treated as such, either by the TCU or as Tax expenditures by the Brazilian Federal Revenue Authority, as explained in the methodological annex of this document.

Most (87.7%) of the values that Inesc presents as incentives and subsidies for fossil fuels are related to those renouncements not computed by official agencies. The objective in presenting these figures is to draw attention to the importance of a technical and political debate about them, their meaning and potential effects, whether from the point of view of collection capacity losses and the consequent erosion of social policy funding, or due to its climatic effects.

Regarding the second point - climate and energy transition - the issue around these incentives and subsidies acquires additional importance. Emissions from fossil fuels[7] have become the dominant source of anthropogenic emissions to the atmosphere since the 1950s and continue their upward trajectory till today[8]. In global terms, in 2019

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[5] Inesc published a study at the beginning of the year, entitled "O Brasil com baixa imunidade – Balanço do Orçamento Geral da União 2019" (Brazil with low immunity - Balance of the Federal General Budget 2019), in which we analyzed the cuts in budgets that should ensure social rights in 2019. See Inesc - "Brazil with low immunity" at: https://www.inesc.org.br/wp-content/uploads/2020/04/Balanco-OGU-Inesc.pdf

[6] According to the concept adopted by the TCU (Court of Federal Union Accounts), the waivers are composed of Tax Expenditures estimated by the RFB and, also, by financial and credit benefits. Available at: https://portal.tcu.gov.br/fatos-fiscal/renuncia_fiscal.html

[7] Global fossil-fuel CO2 emissions in the past decade consist of: 45% from energy production (electricity and heat), 22% from other industries (for example, metal production, chemistry and manufacturing), 20% from land transportation, national transport and aviation, 3.7% from international transport and aviation, and 10% from construction, agriculture, fisheries and other sectors (*Global Carbon Project*). Available at: https://www.globalcarbonproject.org/carbonbudget/19/files/Japan_NIES_GCB2019.pdf

8 Estimates of global and national emissions of fossil-fuel related CO2 (EFF) include burning of fossil fuels through a wide range of activities (for example, transport, heating and cooling, industry, fossil industry's own use and

there was an increase in emissions associated with fossil fuels by 0.6% compared to 2018. Although 2019 shows a drop in the growth rate of these emissions, the continuous and accumulated increase makes the challenge of reversing global warming even greater.

In Brazil, emissions associated with fossil fuels are the third largest source of emissions. According to the Climate Observatory and the Greenhouse Gas Emissions Estimation System (SEEG), in 2018 Brazil emitted 1.9 gross tons of greenhouse gases, with 44% coming from land use changes, 25% of agriculture and 23% in energy, including activities that use fossil fuels, in addition to 5% for waste and 5% for industrial processes.

With a central geopolitical role in the global supply of fossil fuels, the country also has a strategic role in reducing the production and burning of fossils globally. For this reason, the G20 countries, including Brazil, made an international commitment in 2013 to review these subsidies as part of the strategy to reduce the production and consumption of fossil fuels.

That said, it is important to note that, although Brazil has a unique role in this international scenario, as a country with large reserves and production of fossil fuels, it also has an energy and electrical matrix that is considered among the cleanest in the world.

It is worth saying that the qualification, especially of the Brazilian electrical matrix, as being "clean" is due largely to the country's use of hydroelectric generation, which is known to be questionable. Deforestation indirectly associated with the construction of large hydroelectric plants in the Amazon and even the numerous complaints of violation of rights associated with hydroelectric projects are not being considered. In addition, a recent scientific study by Nature Communications points out that some lowland dfams in the Amazon may actually exceed the carbon emission rates of fossil fuel plants[9].

This is important to highlight, in view of the fact that the supposable "clean" character of the Brazilian electrical matrix has been repeatedly used to justify a low profile of government measures to tackle emissions in the energy and industry sectors.

Furthermore, as fossil subsidies are a key part of the global strategy to remove incentives for growth in production and consumption, the issue of fossil fuel incentives

burning natural gas), the production of cement and other process emissions (for example, production of chemicals and fertilizers).

[9] For a reading on the controversial relationship between hydropower and emissions see Philip Fearnside's article at: https://www.nytimes.com/en/2020/10/02/opinion/rios-represas-amazonia.html

and subsidies in Brazil also plays a central role in the international debate on climate change.

Therefore, we ask: what justifies so many incentives, waivers, tax breaks and subsidies related to fossil fuels in the current context? Are they really necessary? Who benefits from them? What are the consequences for the country, in economic, social and environmental terms?

HIGHLIGHTS BY SUBSIDIES CATEGORIES

Detailed data for each category of incentive and subsidy for the year 2019 (values in US$ - United States Dollars, based on the yearly average according to the US Revenue Service - IRS) are presented below.

Fossil Fuel Subsidies, 2019
(current values in US$ thousands)

OTHER WAIVERS	2019	Share in Category Total (%)
REPETRO, Repetro Sped and Industrialization (articles 5 and 6 of Law No. 13.586 / 2017)	$7.100,70	32.15%
IRPJ and CSLL (article 1 of Law No. 13.586 / 2017)	$1.608,97	7.29%
Cide-Fuels for diesel	$4.587,07	20.77%
Cide-fuels for gasoline	$7.350,59	33.28%
Pis/Cofins for Diesel	$1.437,54	6.51%
TOTAL OTHER WAIVERS	**$22.084,87**	**100.00%**

TAX EXPENDITURES	2019	Share in Category Total (%)
REIDI (Budget Function - FO: Energy)	$127,24	26.49%
REPORT (FO Transportation).	$47,01	9.79%
Thermoelectricity	$123,80	25.77%
Liquefied Natural Gas	$51,12	10.64%
Infrastructure Investments (FO Energy)	$64,58	13.44%
Petrochemicals (FO Industry).	$66,63	13.87%
TOTAL TAX EXPENDITURES	**$480,38**	**100.00%**

DIRECT EXPENDITURES	2019	Share in Category Total (%)
CCC - Fuel Consumption Account	$1.663,68	63.40%
Economic subsidy for the sale of diesel oil in the territory (action 00QU)	$522,56	19.91%
CDE - Energy Development Account	$183,03	6.98%
00NY - Transfer of Funds to the Energy Development Account (Law 10.438, of April 26, 2002)	$252,16	9.61%
Geology and geophysics services applied to oil prospecting (action 2050)	$850,45	0.03%
Support for Institutional Projects for Research in the Oil and Natural Gas Sector (CT-Petro) (action 4156)	$1,79	0.07%
TOTAL DIRECT EXPENDITURE	**$2.624,08**	**100.00%**

GRAND TOTAL	**R$98,40**	**100%**

OTHER WAIVERS

Following the methodological choices defined in the previous edition, the calculations involving Other Waivers consider: i) the incentives attributed to the reduction of the Pis/Cofins and Cide-fuels calculation base for gasoline and diesel[10]; ii) renouncements from Repetro; iii) the waivers as a result of Provisional Measure No. 795, converted into Law No. 13.586 / 2017.

The "Other waivers" (OR) reached an expressive value of US$ 22.08 billion in 2019, representing 87.7% of the total incentives and subsidies in the year. This number was driven by a significant increase in Repetro - Special Customs Regime for Exports and Imports of Goods Intended for Exploration and Production of Petroleum and Natural Gas - reaching US$ 7.10 billion in the year, with special considerations for:

Repetro

Repetro represented a waiver of US$ 7.10 billion for Brazilian public coffers in 2019, an increase of 64.1% when compared to 2018, and of 286.6% when compared to 2017, in current values. These numbers must be analyzed.

The increase in renouncements linked to Repetro is, in part, associated with the movement of currency depreciation of the Brazilian Real in the last months of 2019, given that its operation is directly associated with the import of machinery and equipment for research and mining activities at the oil and natural gas reservoirs in the country.

However, perhaps more importantly, this regime is undergoing a process of expansion and transformation, moving from a special customs regime to, jointly, a special tax regime, called Repetro-Sped. Considering this increase in value, it is not possible to differentiate an increase in imports from companies adapting their imported goods before the new regime, leading to a double count - according to official data and explanations by the Brazilian Federal Revenue Authority (RFB). Even without the double count, such a result would mean at least US$ 3.55 billion waived under this regime.

It should be noted that Petrobras has been dismantled in recent years through operations, along with sales of assets and production units carried out at significantly low prices[11]. Besides, the growing participation of "co-qualified" and qualified foreign companies allows for a larger number of foreign companies with access to this major

[10] Please refer to the Methodological Annex.

[11] The progressive participation of foreign investors in the shareholding structure of the state-owned company stands out, reaching 41.21% in April 2020 (PETROBRAS, 04/2020). About the process and the devaluation strategy of the state-owned company, see: https://ineep.org.br/petrobras-ineep-analisa-estrategia-de-desvalorizacao-de-ativos-da-estatal/

benefit granted by the Brazilian government. Most companies from the 15 qualified in the 2019 Regime in 2019 are international companies, conglomerates, and investment funds[12].

Finally, the Brazilian government continued to encourage fossil fuels production in 2019. In November 2019, the so-called "Megaleilão do Pre-Sal" (Pre-salt Mega-auction) was held, bidding for the onerous assignment surplus in four areas, two of which were auctioned – the Búzios and Itapu blocks - at around US$ 16.96 billion (in US$ yearly average). In an auction marked by low international interest[13], the first was auctioned without agio or signing bonus by a consortium formed by Petrobras, China's National Offshore Oil Corporation (CNOOC) and China's National Oil and Gas Exploration and Development Company Ltd (CNODC, subsidiary of the National Petroleum Corporation of China). In the second, it is highlighted that Petrobras will be the operator of the asset (without partners), being the only one to present an offer for the Itapu field.

Pis/Cofins and Cide-Fuels for gasoline and diesel

With respect to Pis/Cofins and Cide-Fuels for gasoline and diesel, keeping the same methodology adopted in the 2018 edition, we present the amounts of tax collection loss based on what is limited by law, despite the official-governmental justification to consider such intervention in the fuel sector more as a tax rule and not as a deviation or exception.

In 2019 alone, US$ 13.3 billion was renounced due to changes in the rates originally established for Pis/Cofins and Cide-Fuels for gasoline and diesel. The fiscal impact of these measures takes on special weight in public accounts and, therefore, in the ability of governments to implement public policies, particularly in a context of deep fiscal crisis in Brazil.

In view of the fiscal component, the broader meaning of the debate on the consumption of fossil fuels should not only focus on the subsidies issue. It is urgent and additionally relevant to also take into account its relationship with cargo and urban transportation, greenhouse gas emissions and the climate, in addition to other relevant social and spatial impacts, which will be dealt with in more detail in a study about consumption, to be published by Inesc soon.

Considerations about Pis/Cofins

[12] See qualified companies at: https://receita.economia.gov.br/orientacao/aduaneira/manuais/repetro/empresas-habilitadas-no-repetro.

[13] The holding of this auction drew attention to the low international interest, since in both fields there was no possibility of "non-exploitation", given that Petrobras itself had already explored the region and confirmed the existence of a huge and high-quality oil and gas reservoir.

Pis and Cofins represent acronyms of two taxes instituted in the Brazilian Federal Constitution, in articles 239 and 195, respectively, the first being related to the Social Integration Program and the second to the Contribution to the Financing of Social Security. These two contributions are levied on the gross revenue of companies (legal entities), except micro and small companies that contribute through a simplified taxation system called Simples Nacional. It is also important to mention that, in 2017, through Decree No. 9.101, the Pis/Cofins rates related to gasoline and the gross revenue of producers or importers, were reduced to zero. Even so, it is necessary to point out that such taxes are important, given that Cofins is the main source for the financing of social security and PIS is the main source of financing for the Brazilian Development Bank (BNDES).

Thus, from a strategic point of view, we ask: does it make sense to increase incentives of these revenues?

TAX EXPENDITURES

The Special Regimes that make up Tax Expenditures (GT) are not entirely specific to the O&G sector, since a portion of the figures presented refers to incentives and waivers linked to the Energy, Transportation, and Industry budgetary functions.

Tax Expenditures totaled US$ 480.3 million in 2019, which corresponds to 1.9% of the total fossil fuel subsidies and renouncements in that year.

The reduction compared to 2018 was mainly driven by annual retractions in the "Thermoelectricity", "Liquefied Natural Gas - LNG" and "Petrochemistry" tax expenditures (GT) categories, whose subsidies in 2019 reached, respectively: US$ 123.7 million (-13.6%/2018); US$ 51.1 million (-38.3%/2018); and US$ 66.6 million (-19.6%/2018).

Some controversial notes that relate to such GTs deserve to be highlighted here:

Firstly, a significant drop in thermoelectric generation through coal and oil plants in Brazil has been taking place in recent years, due to the expansion of projects in thermal generation via biomass (especially from sugarcane bagasse) and natural gas.

Respectively, although biomass is increasingly being used to replace fossil fuels and emit a lower amount of polluting gases, it is not 100% clean energy. It is important to mention that the combustion or burning of biomass is one of the world's largest sources of toxic gases, particulate matter, and greenhouse gases[14].

As previously mentioned, there is a growth in thermal power stations based on natural gas. The Brazilian government has, through regulatory changes and credit incentives, promoted an aggressive expansion of the outflow routes and further processing of natural gas, of which the growth in production is justified by the expansion of production in the Pre-Salt. According to estimates by the Brazilian Energy Research Company (EPE), the net national natural gas production is expected to rise from a volume of 59 million m^3/day in 2018 to 147 million m^3/day in 2030 (EPE, 2019)[15], which represents an increase of about 6.6% per year.

[14] "About 80% of the combustion of biomass occurs in the tropics. It is the largest source of production of toxic gases, particulate matter and greenhouse gases on the planet, influences atmospheric chemistry and physics, produces chemicals that significantly change the pH of rainwater and affects the thermal balance of the atmosphere through interference in the amount of solar radiation reflected into space" (ARBEX, *et al.* 2004). To learn more, check: https://www.scielo.br/scielo.php?pid=S1806-37132004000200015&script=sci_arttext.

[15] Plano Indicativo de Processamento de Gás Natural – PIPE, November 2019. Ministry of Mines and Energy.

It is worth noting that natural gas is responsible for 60% of the world's growth of fossil emissions in recent years[16].

In light of the foregoing, regarding the emissions related to the previous GTs, it is noteworthy that the Brazilian government has signed contracts, until 2024, for the production of energy from new thermoelectric projects through gas[17] and biomass (Generation Auction No. 04/2019). In fact, this year was marked by intense public sales associated with the energy sector, with high percentages of discounts[18] in negotiations in Brazil, as shown in the document "Retrospectiva 2019" (2019 Retrospective) by ANEEL[19].

In the case of infrastructure-related GTs, despite lower retractions in the "Reidi - Energy" incentives (-2.8% in 2019 compared to 2018) and "Reporto - Transportation" (-2.7% in the same comparative basis), the "Investments in Energy Infrastructure" incentives were increased by 48.6%. Together, they accounted for US$ 238.8 million in incentives via tax expenditures on fossils fuels in 2019.

Such results show that, despite the weak economic activity in the country, especially industrial activity in 2019, significant amounts of this category of incentives were still observed, keeping benefits, especially to the private sector linked to fossil fuels in Brazil. Also, the auctions end up benefiting more foreign companies than the national economy and industry[20].

Unequivocally, in the pre-salt area, it is worth remembering that Michel Temer Government's Investment Partnership Program (PPI) establishing the first auction after Petrobras was no longer the only operator, between 2017 and 2018, would be expanded under the current federal management, with strengthening of the speeches

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[16]See: https://www.globalcarbonproject.org/carbonbudget/19/files/Japan_NIES_GCB2019.pdf

[17]The retraction of thermoelectric generation through coal and diesel, favoring the biomass and gas segments through new ventures, corroborate an indicator considered unprecedented for the repositioning of the Ministry of Mines and Energy (MME) in favor of a "greater participation of natural gas plants to generate electricity, which are considered cheaper and less polluting ". See article from 30/08/2019, at: https://bit.ly/3atlBe0

[18]Depreciation of the nominal value of a security or the price of a commodity compared with its market value.

[19] Available at: https://www.aneel.gov.br/documents/656877/15495819/Retrospectiva+ANEEL+-+2019/73fd2b23-c540-8548-f7bd-554702f74133?version=1.0

[20] It is interesting to note that the narratives presented both by the government and reinforced by mainstream media, often treat such structural and infrastructural incentives and investments as necessary to make the country more internationally competitive and attractive to foreign investors, as an unambiguous way to for the country to emerge from the economic crisis that is only increasing and becoming more complex, eventually benefiting countries other than Brazil.

in favor of the concession regimes in detriment of the sharing model adopted in previous governments. The purpose of the measures, which tend to significantly increase some incentives and subsidies, is to attract foreign investments for the exploration of oil and natural gas, through new auction rounds[21].

[21] See: https://economia.uol.com.br/noticias/reuters/2019/11/06/governo-vai-discutir-fim-do-regime-de-partilha-para-pre-sal-diz-ministro.htm.

DIRECT EXPENDITURES

Direct expenditures are made through the General Budget of the Federal Union and, in the case of CCC, mostly through the electricity bill paid by consumers.

Within the Direct Expenditures category, the largest subsidy amount is made via an economic subsidy for the sale of diesel in the territory (action 00QU). It is worth remembering that this budgetary action resulted from the negotiation between the federal government and truck drivers in 2018. The price reduction for diesel fuel occurred, in part, through an economic subsidy with a budgetary impact of R$ 2 billion (US$ 506.8 million) in 2019 and R$ 5 billion (US$ 1.26 billion) in 2018.

There is also a relationship between the Energy Development Account (CDE) - which, in part, is extra budgetary - and the public budget. The budget program "Electricity 2033" (Programa 2033 – Energia Elétrica), under the responsibility of the Ministry of Mines and Energy and the Brazilian Electricity Regulatory Agency, includes the budgetary action "Transfer of Resources to the Energy Development Account" (00NY). Such action enables the transfer of budgetary resources to the CDE (Energy Development Account), but its description states the transfer of resources from the yearly payments made for the use of public goods and the fines imposed by Aneel to concessionaires, permissionaires and authorized companies to the CDE, managed by Centrais Elétricas Brasileiras SA - Eletrobras, to fund the Light for All Program ("Luz para Todos"). It reached US$ 252.6 million in 2019.

Finally, it is worth highlighting the case of CCC, the largest amount on subsidies in this category. This account subsidizes the cost of diesel fueled thermoelectric generation in the Isolated Systems (Sisol), which account for approximately 3% of the electricity used in the country and are composed of power plants that do not yet belong to the National Interconnected System SIN)[22]. In 2019, its value reached US$ 1.66 billion.

The CCC requires a broader debate. As previously shown, subsidies are generally related to the contribution of public resources, which produces - as a direct effect - a reduction in production costs (in the case of a sector or activity segment) or a reduction in the final price (in the case of consumer). However, a subsidy, especially for consumption, is not necessarily supported by public resources alone.

And this is the case with the resources brought in by the CCC. This subsidy ensures that the higher costs of diesel generation from thermoelectric plants in the North region are not fully passed on to consumer energy tariffs. And if this were not the case,

22 The states that make up Sisol are: Acre, Amazonas, Amapá, Mato Grosso, Pará, Rondônia, Roraima and the island of Fernando de Noronha. The cost of energy in isolated regional systems is higher due to the dependence on diesel, the cost of which is higher due to transport.

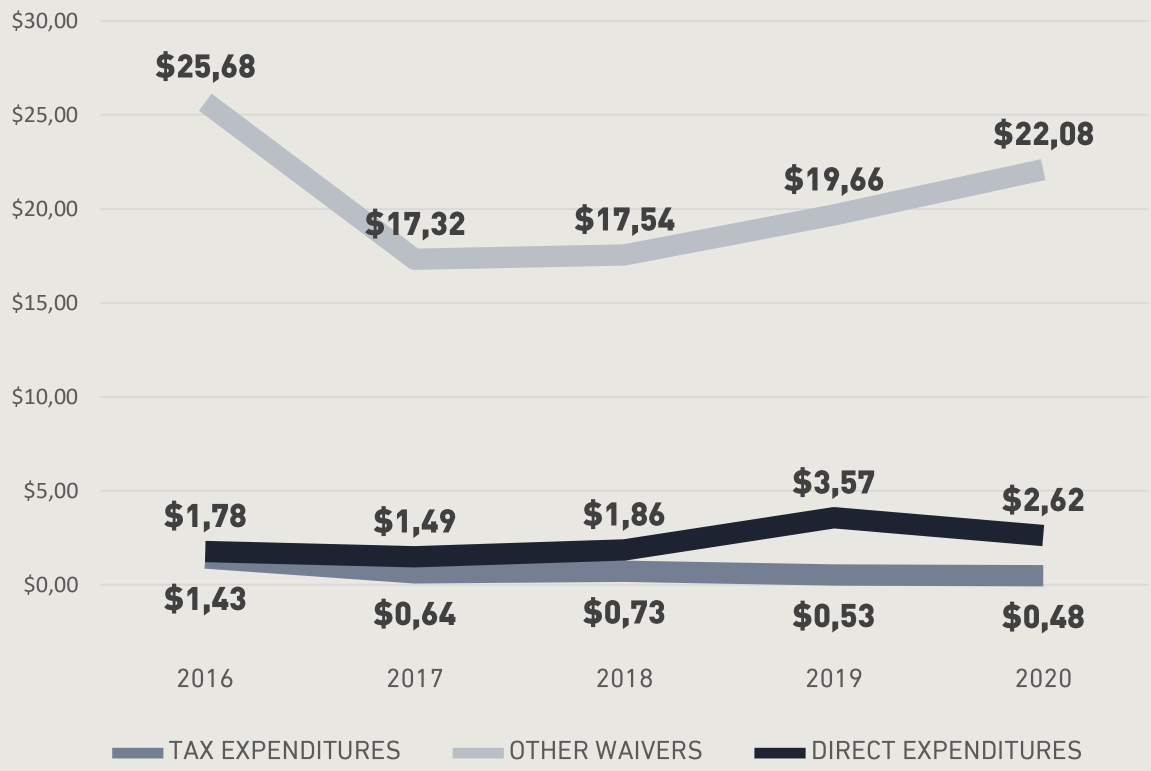
this portion of the population would pay more for energy than consumers from other regions.

However, as CCC's resources come, for the most part, from consumers' pockets, we argue that this is a consumption subsidy paid by consumers themselves. From this point of view, we could consider this subsidy fair, because there is no alternative or interconnected generation in the region capable of offering energy at the price paid in the rest of the country. However, there are alternatives to this subsidy, which are getting closer every day, such as, for example, decentralized generation based on solar energy or biomass. Indigenous groups in Raposa Serra do Sol (RO) and Xingu (PA) are testing solar energy generation experiences with good chances of success. They are examples of how it is possible to reform subsidies to fossil fuels with planning and public policies capable of encouraging other sources to emerge and be more economically, socially, and environmentally viable.

AN OVERVIEW OF SUBSIDIES OVER THE YEARS

Analyzing the historical series, between 2015 and 2019, a reduction of subsidies in dollars was observed. A big decrease in 2016 was followed by an increase in subsequent years.

Fossil Fuel Subsidies
2015 a 2019
(current values in US$ millions - Yearly Average Dollar according to IRS)



For the behavior of the different categories of incentives and subsidies adopted here, it must be noted that:

- As for Tax Expenditures, there was retraction from 2018 onwards, mainly due to the legal extinction of regimes like Repenec

- There was a significant increase in other waivers between 2016 and 2018, mainly due to the higher collection of Pis/Cofins for diesel and gasoline.
- In 2019, there was an increase in other waivers linked to production, in favor of the oil & gas sector, with the approval of the new Repetro (Repetro-Sped and Industrialization) and the expansion of expenses that can be deducted from the contribution calculation base of the Social Contribution on Net Profit (CSLL) from legal entities opting for Actual Profit[23],under the terms of Law No. 13.586/2017, as presented in the methodological annex.

- Direct expenditures that showed a more stable behavior between 2015 and 2017 increased considerably in 2018 and 2019, which is explained by two factors: i) creation of the economic subsidy for the sale of diesel oil in the territory (action 00QU), a result from the negotiation after the truckers' strike; and, ii) the continuous increase in the Fuel Consumption Account.

The following Table(s) provide details for each category in the period from 2015 to 2019.

[23]Actual Profit, or "*Lucro Real*" is a tax regime in which the calculation of the Corporate Income Tax and Social Contribution on Net Profit (CSLL) is made based on the accounting profit, calculated by the legal entity, plus adjustments (positive or negative) required by tax legislation.

Subsidies to Fossil Fuels, Tax Expenditure Category
2015 a 2019
(current values in US$ - Yearly Average Dollar according to IRS)

Production Consumption

TAX EXPENDITURES	2015	2016	2017	2018	2019
REPENEC: Special Incentive Regime for the Development of Oil Infrastructure in the North, Northeast and Midwest Regions	$103.817,97	$3.713,21	$0,00	$0,00	$0,00
REIDI: Special Incentive Regime for Infrastructure Development (Reidi - Energy).	$624.502,92	$235.295,68	$325.725,54	$130.940,07	$127.242,06
REPORTO: Special Incentive Regime for the Modernization and Expansion of Port Structure (REPORTO Transportation).	$82.156,11	$65.212,98	$73.154,57	$48.306,57	$47.006,07
Thermoelectricity	$189.757,96	$120.997,44	$146.217,30	$143.309,24	$123.796,72
Liquefied Natural Gas	$170.867,66	$40.935,01	$47.569,21	$82.850,35	$51.120,75
Infrastructure Investments (Energy).	$7.633,53	$13.292,28	$18.737,74	$43.459,41	$64.576,63
Petrochemistry - Industry.	$246.706,89	$160.830,01	$118.691,06	$82.850,35	$66.634,91
TOTAL	$1.425.443,04	$640.276,61	$730.095,42	$531.716,01	$480.377,13

Fossil Fuel Subsidies, Other Waivers Category

2015 a 2019

(current values in US$ - Yearly Average Dollar according to IRS)

Production **Consumption**

OTHER WAIVERS	2015	2016	2017	2018	2019
REPETRO, Repetro Sped and Industrialization (articles 5 and 6 of Law No. 13.586 / 2017)	$3.297.133,46	$3.591.628,81	$1.836.868,22	$4.327.849,25	$7.100.697,29
IRPJ and CSLL (article 1 of Law No. 13.586 / 2017)	$0,00	$0,00	$0,00	$1.538.763,34	$1.608.971,11
Cide-Fuels for diesel	$5.216.285,24	$4.725.463,62	$5.605.833,67	$5.031.534,84	$4.587.070,36
Cide-fuels for gasoline	$9.015.116,84	$9.001.790,26	$10.100.434,78	$7.974.651,78	$7.350.589,95
Pis/Cofins for Diesel	$3.275.520,29	$0,00	$0,00	$789.416,51	$1.437.543,42
Pis/Cofins for gasoline	$4.874.094,09	$0,00	$0,00	$0,00	$0,00
TOTAL	$25.678.149,92	$17.318.882,69	$17.543.136,66	$19.662.215,71	$22.084.872,13

Fossil Fuel Subsidies, Direct expenditures Category
2015 a 2019
(current values in US$ - Yearly Average Dollar according to IRS)

Production Consumption

DIRECT EXPENDITURES	2015	2016	2017	2018	2019
Geology and geophysics services applied to oil prospecting (action 2050)	$5.083,53	$19.113,03	$26.646,70	$5.347,16	$850,45
Studies for expansion of the gas pipeline network (action 20LH)	$0,00	$102,27	$15,42	$82,31	$0,00
Support for Institutional Projects for Research in the Oil and Natural Gas Sector (CT-Petro) (action 4156)	$3.138,07	$635,53	$549,08	$128,17	$1.791,33
Economic subsidy for the sale of diesel oil in the territory (action 00QU)	$0,00	$0,00	$0,00	1,386,899,448	522,564,785
Economic subsidy on the price of diesel oil (0080)	$1.453,38	$568,52	$0,00	$573,04	$0,00
CCC - Fuel Consumption Account	$1.159.438,19	$964.854,59	$1.521.987,56	$1.701.895,95	$1.663.676,16
CDE - Energy Development Account	$310.651,56	$238.618,76	$0,00	$214.506,17	$183.032,82
00NY - Transfer of Funds to the Energy Development Account (Law 10.438, of April 26, 2002)	$302.509,84	$264.398,71	$308.811,91	$256.982,08	$252.162,76
TOTAL	$1.782.274,57	$1.488.291,41	$1.858.010,67	$3.566.414,34	$2.624.078,29

ELEMENTS FOR PUBLIC DEBATE

INCENTIVES AND SUBSIDIES FOR FOSSIL FUELS

Inesc believes that the challenge of measuring and reforming incentives to fossil fuels is significant. In addition to the methodological difficulties, technical content, and lack of government transparency, it is a political debate about what kind of development we want to achieve. Shaping a public view on the topic, given its broad connections with political, economic, social, environmental, climate and federal issues that impact life and society, is essential to move towards the elimination of fossil fuel subsidies.

Reforming subsidies is assumed within the scope of the G20 as a strategic path to achieve a reduction in the production and consumption of fossil fuels. But, from a national and geopolitical perspective, dealing with incentives and subsidies is a huge challenge in many levels. An example of this is the increasing inflow of foreign investments in the pre-salt areas, to the detriment of Petrobras, with an increase in lobbies for expanding subsidies, such as the renovation and expansion of Repetro.

The issue of oil income is also significant in the relationship between growth in fossil production and federal interests. In 2019, royalties reached US$ 5.93 billion. Another US$ 7.97 billion was distributed as Special Participation, in which: US$ 3.99 billion for the Union, US$ 3.18 billion for the States and US$ 798.2 million for the municipalities.

In the face of such expressive numbers for incentives and subsidies, and of a challenge as complex as it is urgent, three central questions should guide the debate on incentives and subsidies in the Brazilian context:

The conceptual and normative challenges of understanding fossil fuel incentives and subsidies.

Measuring and analyzing fossil fuel incentives and subsidies is no easy task.

Depending on methodological choices, the numbers vary in the tens of billions. In the case of subsidies involving the consumption of diesel and gasoline, the superlative numbers express the methodological choice of showing how much would be collected if the government had not made successive changes in the rates established for Pis/Cofins and Cide. It is also a political choice to present the figures to provoke public debate about what consumer subsidies are and how much they are.

For this reason too, the work of governments in measuring their subsidies has been done through so-called peer reviews, where two countries submit their concepts and numbers to a bilateral assessment that is also technically supported by the OECD.

In view of the effort to evaluate and review subsidies, which must be global and multilateral, it is strategic that the Brazilian government makes the necessary effort to evaluate and review its subsidies, starting by presenting what it considers -
among other waivers, tax expenditures and direct expenditures - such as incentives and subsidies to fossil fuels. The safest way to do this would be through peer review assessments, a mechanism agreed within the scope of the G20.

Lack of data transparency

The lack of data transparency represents a significant challenge for monitoring subsidies, especially in the "Other Waivers" category. The government's methodological choice to leave instituted "Other Waivers" out of the calculation of Tax Expenditures, in addition to underestimating the latter, is a critical issue in the case of fossil fuels. It is worth mentioning, as shown in this study, that this choice implies excluding Repetro - the largest special regime linked to the oil extraction industry - from Tax Expenditures. Renouncements related to CSLL attributed under Law No. 13.586/2017 are also excluded from Tax Expenditures.

Considering that an important part of these incentives is not made public, especially regarding waivers, a few actions are recommended:

- **Within the scope of the federal executive branch**, information on which companies are beneficiaries of the subsidies and with what amounts should become more transparent[24].
- **Within the scope of the legislative branch,** the law must allow the Brazilian population to know which companies benefit from tax exemptions and in what amount. Complementary Bill 162/2019 has already been approved by the Brazilian Senate, which obliges the Brazilian Revenue Service to disclose which companies benefit from tax and contribution waivers. The bill must, however, be voted by the Chamber of Deputies.
- **The necessary connections between reform of incentives and subsidies, tax reform and the energy transition must be made on a global and national scale.**

Mitigating GHG emissions and stabilizing their concentrations in the atmosphere to a level that would limit dangerous interference in the climate system is a challenge to be faced at both international and national levels. Without disregarding the high political and geopolitical challenges involving the production of fossil fuels, the debate about the revising these subsidies as one of the ways to curb production is urgent. At the national level, the topic is linked to several issues so urgent that they are on the political agenda. The first issue is tax reform.

There are proposals from civil society organizations for a green tax reform that are linked to the challenge posed here They are presented on the website http://estafaltandoverde.org.br/. It is therefore necessary to reinforce the proposals here:

- The prohibition expressed in the Federal Constitution to the possibility of instituting tax benefits to sectors that are in disagreement with these GHG emission reduction targets.
- The conversion of Cide-Fuels into Cide-Carbon with broader application and impact, respecting fiscal neutrality or the current tax burden. It is worth noting that the proposal provides: (i) that the Cide rate can be differentiated by product or use according to its GHG emission factor; and (ii) that the funds

[24]Although ordinances granting exemptions are published in the Federal Official Gazette, they are dispersed over time and the exemption amounts by beneficiaries are protected by fiscal secrecy.

raised would be used in part to pay subsidies related to fuels that reduce GHG emissions from the transport sector.

The second issue is taxation in general. Subsidies mean that less resources can potentially be devoted to financing public policies that ensure rights and that are central to stimulating a broad process of resuming growth based on the energy transition.

Reforming fossil subsidies in the current Brazilian fiscal scenario is a necessary measure, so that projects and initiatives that promote innovation, technological capacity and investments based on clean energy can be financed.

No less important in the arguments for reform, and in favor of an energy transition with social justice, is the defense of the application of the “maximum resources available to ensure rights”. This principle, established in the “International Covenant on Economic, Social and Cultural Rights - ICESCR”, must also be interpreted as a commitment to reform subsidies as a way of expanding fiscal resources to ensure rights.

METHODOLOGICAL ANNEX

Emphasizing the separation between Tax Expenditures, Direct Expenditures and Other Waivers

In addition to the tax obligation, Brazil has an extraordinarily complex revenue waiver structure, which makes our tax system a great exception. The mechanisms that operate these waivers of federal revenues are exemptions, amnesties, remissions, subsidies, along with financial, tax and credit benefits.

The main constitutional provision that addresses the issue is article 165, paragraph 6, in verbis:

> *Paragraph 6 - The budget bill shall be accompanied by a regionalized statement on the effect on revenues and expenses, deriving from exemptions, amnesties, remissions, subsidies, and benefits of a financial, tributary and credit nature.*

In order to comply with the constitutional provisions, in addition to Law No. 4.320 of 1964 (accepted by the Federal Constitution as a complementary law, which brought the general rules for the preparation and control of budgets and balance sheets of federal entities), Complementary Law No. 101/2000 was instituted - Fiscal Responsibility Law - LRF, which focused on responsibility in tax management and regulated the subject of tax waivers:

> *"article 14. The granting or broadening of tax incentives or benefits resulting in tax breaks must be accompanied by an estimate of its budgetary/financial impact in the year it becomes effective and in the two subsequent years; it must comply also with the provisions of the Budgetary Directives Law and meet at least one of the following conditions:*
>
> *(...)*
>
> *Paragraph 1 -* ***The tax break comprises amnesty, remission, subsidy, presumed credit, exemptions granted on an exceptional basis, changes in tax rate or calculation base which implies in a discriminating reduction in taxes or contributions, and other benefits that result from a differentiated treatment".***

Almeida (2000)[25] clarifies that although the objectives of the revenue renouncement or tax break are public by nature, when everything happens outside the public budget, the revenue waiver is treated as an indirect expense, in contrast to those inserted in the context of the Federal budget, considered as direct expenditures.

The Brazilian Federal Revenue Authority (RFB) classifies indirect expenditures as tax expenditures (GT) carried out by the government, outside the budget, through the tax system, aiming at meeting economic and social objectives and constituting an exception to the reference tax system, reducing the potential collection and, consequently, increasing the economic availability of the taxpayer (RFB). This is a methodological choice that does not include "other waivers", which are general exemptions, introduced by less costly tax legislation, as they understand that changes of this nature generate a new tax reference.

Other tax waivers (OR) or other tax reductions are calculated according to the previous tax rule and use the first year of the presidential term as a reference, due to recurring changes in the tax system.

Direct expenditures (GD) are those made within the scope of the public budget, carried out by the Public Administration, in which the proceeds of its revenues have objectives and purposes previously established in the budget laws, multi-year plan and budget guidelines.

[25] *Almeida, F C R. Uma Abordagem Estruturada da Renúncia de Receita Pública Federal. TCU, No. 84 (2000).*

Calculation of tax incentives for diesel and gasoline using our own methodology

The incentives from Cide-fuels and Pis/Cofins represent most of the subsidies for the consumption of fossil fuels in Brazil today. Since the 2018 edition, Inesc has chosen to adopt a methodology that considers the loss of revenue in comparison to what the law initially established as a limit, which is the procedure adopted by the Organization for Economic Cooperation and Development (OECD).

Over time, decrees were issued producing successive changes to Cide and Pis/Cofins for diesel and gasoline. These changes had a profound influence on the potential collection based on the limits initially established. The following tables elucidate this point.

Adjustments to Cide-Fuel - R$/m³

2004 a 2019

(current values in Brazilian Reais)

Type of fuel	Stated by law	2004	2008	2009	2011	2011*	2012	2015	2018	2019
Gasoline (m3)	R$860	R$280	R$180	R$230	R$193	R$91	R$0	R$10	R$100	R$100
Diesel (m3)	R$390	R$70	R$30	R$70	R$70	R$47	R$0	R$50	R$0	R$0

**Second alteration made in 2011*
Information acquired via LAI (Acess to Information Law)

Adjustments to PIS/Cofins for fuels - R$/m³

2004 a 2019

(current values in Brazilian Reais)

Type of fuel	Stated by law	2004	2015	2016	2018	2019
Gasoline (m3)	R$792,50	R$261,60	R$381,60	R$792,50	R$792,50	R$792,50
Diesel (m3)	R$461,50	R$148,00	R$248,00	R$461,50	R$351,50	R$351,50

Information acquired via LAI (Acess to Information Law)

In order to carry out the calculations, Inesc started from clarifications offered by the Brazilian Federal Revenue Authority based on the Access to Information Law (LAI). Therefore, the volumes of diesel and gasoline sold in 2019 (ANP) were used. A discount of 8% was made for biodiesel mixed with diesel until February 2018, and 10% from March to December 2018[26].

On the calculation for volumes sold, rates were applied based on what the law originally established. These amounts were considered as the basis for calculating the tax incentives compared with the amount actually collected.

[26] From 2008, the mixture of pure biodiesel (B100) to diesel oil became mandatory and in a staggered way. The mix was at 7% between 2015 and 2017. Between March 2017 and February 2018 it was 8% and, as of March 2018 the mixture became 10%.

Key Differences between Repetro and Law 13.586/

Repetro is a special customs regime for the export and import of goods that is intended for research and mining activities in oil and natural gas reservoirs. The regime was only focused on customs, in the form of ficta exports[27] temporary admissions[28] and *drawback*[29]. It was extended until 2040, with some changes, Repetro-SPED and Repetro-Industrialization. Thus, the main goods or accessories admitted before 12/31/2018, under the Repetro regime, and which did not migrate to Repetro-SPED, until 6/30/2019, will have the day of 12/31/2020 as due date.

Repetro-SPED and Repetro-Industrialization (articles 5 and 6 of Law No. 13.586/2017) expanded the old Repetro, also transforming it into a special tax regime. The benefited activities were expanded to the exploration, development and production phases of oil and gas deposits[30] and the possibilities of definitive importation of goods and raw materials were introduced, including acquisition in the domestic market[31], with the total and permanent[32] (rate of 0%) suspension of all federal taxes after 5 years. The benefited companies are: (a) oil and gas operators (companies that have a concession with the ANP); (b) contractor for the operator; (c) subcontractor to the operator's contractor.

In addition to that established by the Repetro regime, the oil and gas sector also benefits from tax exemption related to the expense of exhaustion and depreciation of machinery. These modalities are presented in Law 13.586 but are not considered a part of Repetro (or Repetro-Sped and Repetro-Industrialization) by the RFB, leading to the need of waivers demonstration related to Law 13.586/2017 in addition to Repetro.

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[27]Ficta exports is when the product is sold to an express company headquartered abroad or to a foreign government entity, in a freely convertible foreign currency, but does not leave national territory, under the terms of article 458, of Decree No. 6,759 / 2009.

[28]Temporary admission for economic use, within the scope of the special customs regime for the export and import of goods destined to the research and mining activities of oil and natural gas deposits - Repetro, allows the import of goods destined for economic use in the Country, with the total suspension of taxes for a fixed period (article 458, caput and §3, of Decree nº 6.759/2009).

[29]*Drawback* consists of the suspension or elimination of taxes on imported goods for use in exported products. The mechanism works as an incentive to exports, as it reduces the production costs of exportable products, making them more competitive in the international market (article 2nd, III, of Decree No. 3.161 / 1999 and article 458, II, Decree No. 6.759/2009).

[30] In technical terms, the exploration phase goes through three main stages: prospecting (research, with the characterization of sedimentary basins), drilling (with economic analysis) and extraction (properly speaking) - in this way the new law benefits, virtually all the steps involved.

[31]National acquisition (permanent module, whether national or international). Goods that can be purchased: raw materials, intermediates and packaging materials to be used integrally in the process of industrialization of the final product destined to the activities of exploration, development and production of oil (article 6 of Law No. 13.586, of 2017).

[32]Permanent import (with the total suspension of federal taxes, that is, a consumption import). Federal tax rate converts to zero after 5 (five) years (article 6 of Law No. 13.586, of 2017).

The entrepreneur can deduct the amounts applied from the calculation base of the Social Contribution on Net Profit (CSLL) in each calculation period, for the exploration and production activities of oil and natural gas deposits, defined by law, the expense exhaustion and depreciation of machinery and instruments used in the development of production, pursuant to article 1 of Law No. 13.586/2017.

ACRONYMS

ANEEL – Brazilian Electricity Regulatory Agency
ANP - National Agency of Petroleum, Natural Gas and Biofuels
AFRMM – Additional Freight for the Renewing of the Merchant Marine
BNDES – The Brazilian Development Bank
CCC – Fuel Consumption Account
CCE – Energy Consumption Account
CDE – Energy Development Account
CIDE – Contributions for Intervention in the Economic Domain
CNODC – China National Oil and Gas Exploration and Development Company Ltd
CNOOC – China National Offshore Oil Corporation
COFINS – Contribution for the Financing of Social security
COPPE – Alberto Luiz Coimbra Institute for Graduate Studies and Research in Engineering, Federal University of Rio de Janeiro
CSLL – Social Contribution on Net Profit
DGT – Demonstrative of Tax Expenditures
DOU – Official Gazette of the Union
E&P – Exploration and Production
FO – Budget Function
GATT – GD – Direct Spending.
GT – Tax Expenditures
GEE – Greenhouse Gases
ICS – Institute for Climate and Society
INESC – Institute of Socioeconomic Studies
IEA – International Energy Agency
II – Import Taxes
IPI – Tax on Industrialized Products
LAI – Access to Information Law
LDO – Budget Guidelines Law
LRF – Fiscal Responsibility Law
MME – Mines and Energy Ministry
MP – Provisional Measure
OCI – Oil Change International
ODI – Overseas Development Institute
OMC – World Trade Organization
OR – Other Waivers

O&G – Oil and Gas
OCDE – Organization for Economic Cooperation and Development
PA – Pará
R&D – Research and Development
OGU – General Budget of the Federal Union
PASEP – Public Servant Asset Formation Program
PIB – Gross Domestic Product
PIS – Social Integration Program
REIDI – Special Incentive Regime for Infrastructure Development
REPENEC – Special Incentive Regime for the Development of Oil Infrastructure in the North, Northeast and Midwest Regions
REPETRO – Special Customs Regime for Exports and Imports of Goods Intended for Exploration and Production of Petroleum and Natural Gas.
REPORTO – Special Incentive Regime for the Modernization and Expansion of Port Structure
RFB – Brazilian Federal Revenue Authority, Ministry of Economics
RO – Rondônia
SEEG - Greenhouse Gas Emissions Estimation System
SIN – National Interconnected System
TCU – Court of Federal Union Accounts
UFRJ – Federal University of Rio de Janeiro
UNFCCC – United Nations Framework Convention on Climate Change.

MASTHEAD

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Nathalie Beghin

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Marcela Coelho M. Esteves

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Ana Carolina Soares
Thaís Vivas

Political Advisory
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Cleo Manhas
Leila Saraiva Pantoja
Livi Gerbase
Luiza Pinheiro
Márcia Acioli
Tatiana Oliveira

Technical Assistance
Dyarley Viana de Oliveira

Social Educator
Thallita de Oliveira
Marcus Silva

Accountant
Rosa Diná Gomes Ferreira

Accounting Assistant
Ricardo Santana da Silva

Computer Technician
Cristóvão Frinhani

Administrative Assistants
Adalberto Vieira dos Santos
Eugênia Christina Alves Ferreira
Isabela Mara dos Santos da Silva
Josemar Vieira dos Santos

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INSTITUTIONAL SUPPORT

BIC – Bank Information Center

Charles Stewart Mott Foundation

CLUA – Climate and Land Use Alliance

Fastenopfer

FLD - Lutheran Foundation of Diaconia

Avina Foundation

Ford Foundation

Heinrich Böll Foundation

Itaú Social Foundation

Fundar

IBP – Center on Budget and Policy Priorities

ICS – Institute for Climate and Society

KNH – Kindernothilf

Malala Fund

Misereor

OSF – Open Society Foundations

Oxfam Brasil

Pepsico Brazil

PPM - Bread for the World

Pulsante

Rainforest
SAGE - New Venture Fund

INESC – Institute of Socioeconomic Studies
Address: SCS Quadra 01 - Bloco L, nº 17, 13th Floor - Edifício Márcia
CEP 70.3037-900 - Brasília / DF / Brazil
Phone: + 55 61 3212-0200
E-mail: inesc@inesc.org.br
Website: www.inesc.org.br