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Local content: local content policies in the oil and natural gas sector in rio das ostras and region

Local content policies: local content policies in the oil and natural gas sector in rio das ostras and region

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Abstract

The aim of this paper is to present the concept and purpose of local content policies, demonstrate such policies in the Oil and gas industry developed in Brazil and reviewing the implementation of the policy locally, in the center of the Oyster River industrial sector. To carry out this work a theoretical and historical study on the topic was conducted. It was realized that this policy and the enforcement of local content aims to protect the provision of local / national services with the aim of contributing to the development of national industry of goods and services, the exploration and production of oil industry.

Keywords: Local Content. Policy. Technology. Concepts.

Resumo

O objetivo desse trabalho é apresentar o conceito e objetivo de políticas de Conteúdo Local, demostrar tais políticas no setor de Petróleo e gás natural desenvolvidas no Brasil e analisar a aplicação da política localmente, no setor industrial da cidade de Rio das Ostras. Para realização desse trabalho foi realizado um estudo teórico e histórico sobre o tema. Percebeu-se que esta política e a aplicação da legislação de conteúdo local pretende proteger a prestação de serviços nacionais/locais com o propósito de contribuir para o desenvolvimento da indústria nacional de bens e serviços, no setor de exploração e produção de petróleo.

Palavras-chave: Políticas. Conteúdo Local. Tecnologia. Conceitos.

Introduction

Currently, several actions have been taken to maximize the quality of national industries as well as encourage the development of new economic sectors.

One of the significant industries in the Brazilian industrial process is oil and



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gas extraction. There are several companies, national and foreign, that operate in the market, whether exploring for oil or acting in the market indirectly. Given this scenario, the government realized the need to develop a competitive policy to foster the development of the national economy and market development. petroleum.

One of the main public policy actions currently in force in Brazil is the Local Content policy (CL ¹), that is, an incentive process with the intention of improving the Brazilian supply capacity, for the development of the local industry of goods and services to generate competition at international levels; generate income and jobs; new inputs and leverage technology in Brazil. In this sense, it becomes relevant to understand this policy in order to reflect on this challenge, in addition to the challenge of a deindustrialization process that passes the Brazil (Kamat et al., 2019).

In a capitalist world, the productive efficiency or inefficiency of the industrial sector interferes positively or negatively, in a chain, in the entire economic system and can generate jobs or unemployment at significant levels. Faced with the advancement of technology used in the industrial sector and even more specifically in the oil and gas extraction sector, direct and indirect job vacancies and providers of goods and services for the oil industry increasingly require complex technological training and knowledge.

Brazil historically presents a weakness in the training and technological education system, making it evident a failure in the provision of local goods and services to meet the needs of local industries, whether national or foreign, but which demand more goods and services. complexes. Hence, many times, these services are provided by foreign companies benefiting the generation of jobs abroad (Kamat et al., 2019).

Given this context, the local content policy aims to positively address the failures in the most complex and technological chain of the Brazilian economy to promote the development of the industry place. According to the IBP 2 , the Campos Basin represents 80% of national production, despite new discoveries placing the Santos Basin as the one with the greatest extractive capacity.

The Campos Basin extends over 100,000 square kilometers of Espírito Santo and the coast of Rio de Janeiro, where Petrobras installed the largest oil complexes for exploration in deep waters, however, requiring a high level of technological knowledge, generating a significant demand for service specialized services in specific technologies, with enormous technological challenges.

Due to the proximity of the city of Rio das Ostras to the pre-salt oil extraction center of Macaé, this research delimits its universe of analysis and identification of the application of the local content policy, to the industries of this municipality, with the objective of studying the said policy and its contribution to the development of the national/local industry of goods and services, the exploration and production sector of Petroleum.

In order to present the Local Content policy, as well as to discuss its relevance for the development of the local industrial sector, this article is divided into four parts. Firstly, it presents the Local Content policies in the national industry; subsequently comments on the legislation and the Local Content law, contemplating the certification of goods and services acquired in Brazil and abroad and then



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discusses the methodology, where a questionnaire was constructed with relevant questions for an analysis of the success or failure of the Local Content policy (Kamat et al., 2019).

Local content policies in the industry national

Since its creation in the 1950s, Petrobras has been structuring itself in order to form suppliers of goods, services and labor in Brazil, it is of great relevance to replace imports and develop the local industry. Thus, he believes that the local content (LC) policy is a way to encourage competitiveness at international levels, increasing income, generating jobs, creating new inputs and technologies in the Brazil.

According to ANP 1 (1999), the national supplier industry went through two stages. The first was the supply chain, which lasted 25 years, from its creation until the mid-1970s. In 1954, the purchase rate in Brazil was 10% and in 1979, it reached 84% of materials and equipment purchased in the country. The second stage was evidenced by the boost in E&P 2 activities, which started to play a more prominent role within the national oil industry.

According to ANP (1999), in the 1970s, when the Campos Basin 3 was discovered , there was an accelerated increase in Petrobras' investment. At this time focused on the E&P segments . Turning the state-owned company towards exploration, development, production and transport activities. In 1979, DEPRO 4 – Production Department – was created – this department had the obligation to increase production to 165,000 bpd . Subsequently, GEGAN 5 – Campos Basin Executive Group was created. This body was temporary and had the mission of installing the first seven fixed oil platforms in the Basin. National participation (Local Content) reached 93% of total purchases in 1986, this index was a record in the history of the time, in the amount of US\$ 1.3 billion, this value was only surpassed in the 1990s . 90 (Kamat et al., 2019).

As much as the accumulations of oil and gas on land were small, even so, it made Petrobras feel encouraged to explore for a new discovery, the sea. The most important discovery was the Campos Basin , with 27 gas and oil accumulations. There was a rapid growth in the company 's investment volumes , at that time focused on the E&P (Exploration and Oil) segment, thus starting the new stage.

In order to develop the production of accumulations in the discovery of offshore area ¹, the company was impacted with a new technology. The services, materials and equipment that were extremely necessary for the platform and production system at sea were new to Petrobras and to the domestic market. Therefore, there was a need to make purchases abroad, with this, there was a great decline in the percentage rates of nationalization. As such, it caused a large drop in percentage rates of nationalization to 52% in 1980 (Anp , 1999).

However, still according to ANP (1999), the national market noticed the changes and so in three years the national purchase indexes increased to the stage of 80%. A good proportion of foreign supplier companies decided to form partnerships with national companies or established themselves in Brazil. In 1984, it



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returned to the 90% stage, a stage in which the lack of foreign currency in the country still indicated the need to replace imports , regardless of the actual competitiveness of the product national.

According to Fernández and Alvarenga (2003), gigantic exploration projects in deep waters indicated the need for investments by Petrobras from the 1990s onwards. often in lower conditions in terms of financial costs and tax.

According to Furtado (2003), equipment suppliers, particularly in the shipbuilding segment, were those who had an extreme connection to the investments undertaken by Petrobras, since the 1980s, since the already offshore production of the Campos Basin, were affected by the flow of these investments in the early 1990s. Investments continued at the normal level of 90% in the middle of this decade, when the government raised the prices of oil derivatives, making it possible to explore the potential discovered in the Campos Basin.

Deindustrialization in Brazil

Author Marquetti published one of the first studies on the deindustrialization of the Brazilian economy. According to data presented by this author for the manufacturing industry, the Brazilian economy would have gone through a process of deindustrialization in the 1980s and 1990s, both in terms of the share of employment and the share of added value.

According to Marquetti (2002), the "deindustrialization" that occurred during this period was a consequence of the low investment made in the Brazilian economy, particularly in industry. Still according to this author, the process of deindustrialization that took place in this period would be essentially negative on the growth prospects of the Brazilian economy, given that it would be associated with the transfer of resources and work from industry to sectors with lower labor productivity, thus generating a lower potential output growth in the long run.

In Robert Rowthorn 's (1987) perspective, the drop in industrial profit can be considered as one of the first explanations. Technological innovation that replaces people with machines and the organic composition of social capital decreases. Assuming that labor can only produce new additional value, this greater physical output incorporates less value. The average rate of industrial profit therefore declines in the long run.

Rowthorn and Wells (1987) further distinguish two explanations, where in the first explanation he believes that deindustrialization is a positive process, being a sign of the maturity of the economy, and in the second explanation he says that deindustrialization is a negative process, such as poor economic performance. He also suggests that deindustrialization can be both an effect and a cause of poor performance. economic.

Benefits of CL in the local goods and services industry services

Local content is nothing more than a portion of national investments used in a given good or service, it is equivalent to the amount of participation of the national industry in the production of good and service. Thus, when a platform or refinery has

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a high CL index, it means that most of it was built using domestic goods and services and not imported.

Local content policy to achieve maximum success is developed in sectors of the economy that require highly complex goods, with the obligation that their manufacture has a minimum percentage of inputs from nationals, with the objective of developing the local industry, more specifically the production chain of the economy.

Mendonça and Vasconcelos (2008) draw attention to the increase in the flow of goods in Brazilian ports, a factor that has generated great demands on the Brazilian economy, which is currently in a productive situation with high technology, and therefore makes a great contribution to innovation through the purchase of machinery and equipment.

Thus, industrial policy can be explained as a government effort to leverage sectors considered important for the country's economic growth. It prefers to protect and instigate certain sectors, of minor relevance, in this way the governments are directing their actions in search of a development strategy.

Barroso and Macedo (2010) state that the oil and gas sector gained a significant contribution with the contextualization of CL. There are greater benefits from the generation of local jobs and improvement in the distribution of wealth.

LEGISLATION OF CL

Until 1997, the Union had an exclusive monopoly on fuel distribution and resale, all activities related to the hydrocarbon sector, such as research, mining, refining, transport, import and export. However, 1997 was a defining moment for the oil sector, it was the opening period of the Brazilian oil sector, through the Petroleum Law (Law No. 9,478/1997), so that private companies could participate in such activities.

This same law created the National Petroleum Agency (and later the National Petroleum, Natural Gas and Biofuels Agency, ANP), as a regulatory body, and after the break of the The monopoly began to impose that exploration and production area concessionaires provide uniform service to local suppliers in all projects in the country. Brazil (Asiago, 2017).

The local supplier industry, opening up the oil sector, through Law 9,478-1997, which fostered competitiveness among similar foreign companies in the sector. This competition is due to standards, global contracts and investments by foreign operating companies penetrating the domestic exploration and production sector. In this way, there was a drop in the market, causing a loss in participation and thus a decline, mainly in purchases made in the Petrobras (Asiago , 2017).

However, in the moment following the opening of the Brazilian oil sector and the continued growth of Petrobras' activities, new opportunities for local supply developed. Thus, the fear of having a disproportionate expansion of the acquisition of goods and services abroad was raised.

For various reasons, there has been a sequence of government policies, even Petrobras' own policies, which have been introduced or strengthened since the

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opening of the sector, aiming to stretch the growth in the participation of the local supplier industry, in the expenses with goods and services of the operating companies, and still forcing the local industry to develop the competitiveness of the industry in international standards. Thus, in this way, it forced the local company to be as good as the international company, with the intention of emphasizing competitiveness, in terms of being good in cost, time and quality.

However, the National Petroleum, Natural Gas and Biofuels Agency (ANP), guided by the political decisions of the National Council for Energy Policies, created new rules for the item of local content in the tenders for exploration and production blocks. Therefore, the main objective of this change being the implementation of a policy that results in an increase in the level of employment in the country.

According to Fernández and Pedrosa (2003), even if the requirement of a minimum percentage of local content can have an immediate consequence by multiplying the generation of jobs, the growth of the labor market, it will not be sustainable in the medium and long term. Since there is a need to develop alternatives to increase the competitiveness of the national industry in the international market.

The local content certification system aims to establish the legal conditions for carrying out the routines related to the requirements of the local content clause introduced as of the Seventh Round. In this way, the ANP created the Local Content Certification System , whose regulations were published on November 16, 2007, after the consultation process was completed. public.

With this system, the methodology for certification and the rules of the certifying entities with the ANP were developed. These accrediting entities will be responsible for measuring and reporting to the ANP the local content of goods and services contracted by the concessionaire companies for exploration and development activities for oil and gas production. Natural.

The Local Content Certification System comprises a set of four resolutions:

- a) ANP Resolution No. 19 of 06.14.2013, which defines the criteria and procedures for carrying out local content certification activities . (Annex II Content Booklet Place).
- b) ANP Resolution No. 37 of 11.13.2007, which defines the criteria and procedures for registration and accreditation of entities to carry out the activity of local content certification.
- c) ANP Resolution No. 38/2007 of 11.13.2007, which defines the audit criteria and procedures in companies authorized to carry out the activity of content certification place.
- d) ANP Resolution No. 39/2007 of 11.13.2007, which defines the reports of local investments in exploration and production development in Concession Contracts as of the Seventh Round of Bids.

e)

In reference to ANP n° 19 of 06.14.2013, THE DIRECTOR-GENERAL of the NATIONAL AGENCY OF PETROLEUM, NATURAL GAS AND BIOFUELS – ANP, in



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the use of your assignments cool and by having in View The deliberation in what treat The Resolution in board no. 510, of May 29, 2013, referring to the Local Content Clause contained in the Concession Agreements established between the ANP and the concessionaires as of 2005, the Onerous Assignment Agreements and the Sharing Agreements, for Exploration and Development of Oil Production and /or Natural Gas.

Thus, from the seventh round of bidding, held in 2005, the ANP introduced new rules and requirements for the length of contractual local content, which also started to establish that the percentages proposed by the bidders were within the maximum and minimum values established by the ANP. Thus, it established a requirement for the use of the Local Content Booklet, in addition to requiring the need for Local Content Certification. These rules established in the seventh round remain in effect. (regulated through ANP Ordinances No. 19,36, 37, 38 and 39).

Prominp and Content Place

The federal government, in particular the Ministry of Mines and Energy, through PROMINP ¹ (National Petroleum and Natural Gas Industry Mobilization Program), detected the need to have a methodology for measuring the local content index of industry projects of oil and natural gas. To remedy this deficiency, it created the Local Content Booklet in July 2004. This booklet establishes a methodology for calculating the local content of goods, systems, subsystems and services related to the sector and also seeks the origin of the manufacture of the components that make up each piece of equipment . , evaluates the value of imported inputs in comparison with the value of the good and consolidates them in the local content index (Asiago , 2017).

With the presentation of the local content booklet to the ANP, measurements were carried out using this methodology in projects in the area of E&P and Petrobras supply . In the Exploration and Oil (E&P) project, called "Local Content Assessment" based on the Booklet Methodology, thus, the booklet became a reference for measuring CL in the exploratory block and in the development phase of production, the barracuda field . The Booklet was used in the measurement of some units of the Paulínia Refinery (Replan).

Prominp decided that the Booklet could be applicable to projects in the oil and natural gas industry. In this way, the public notice for the seventh bidding round for exploration by the ANP, which took place in August 2005, determines the Prominp 's "Local Content Primer" as the methodology for measuring local content. This fact, until today, generates a lot of criticism from the national oil and natural gas industry, as many companies and agents of the booklet's methodology fail when it comes to applicability, making it difficult to coherence with reality and its application in the context of the project.

According to Prominp , meetings are held periodically in order to assess the program's growth throughout the year and, based on the debates and new opportunities in the sector, establish norms to conduct the Program's initiatives for the following year. Several entities and actors involved in Prominp usually participate in the event , which contribute, through presentations and discussions, important



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factors to strengthen the national industry of goods and services, in the oil and gas sector Natural.

And yet, in parallel, the Executive Coordination of Prominp, measures the percentages of local content in the different undertakings that make up Petrobras' project portfolio, the objective is to monitor the evolution of the indicator.

Prominp also states that its essential performance by Prominp in relation to local content obligations takes place within the scope of assessing the competitiveness and capacity of the local supplier industry, identifying the industry's capacity to meet the demands of operating companies. This analysis is relevant when making policy decisions to maximize local content, as well as the probability of the policies instituted.

According to Brasil Energia magazine (2008), the importance of the program is recognized as it brings Petrobras closer to the supply chain in a structured way. Many times the characteristic of the national product does not match the specification of Petrobras, at this moment Prominp 's performance is relevant so that it can make adjustments to the product.

And yet, according to Brasil Energia magazine (2008), the program focuses on a certain point, which is the issue of replacing imports based on the technological training of the local supplier, not forgetting to mention that between 2003 and 2007, the program identified 24 products, which the national industry could manufacture, with this, R\$50 million was made available to develop these equipments, through terms of cooperation, with resources from Petrobras and Providers.

According to Prominp (2014), since its launch in 2003, personnel have been qualified for the oil and natural gas industry, this qualification is carried out by the PNQP (National Professional Qualification Plan), they are free courses, the courses are offered in areas that really there are ventures in the sector's supply chain. From 2006 to 2013, over 97,000 professionals were qualified, including basic, medium, technical and higher education, distributed in 185 professional categories related to the sector's activities.

Still according to Prominp (2014), in Macaé the institution that offers the largest number of courses through the PNQP is Senai , offering the Offshore Crane Simulator course, developed with fully national technology and installed in Macaé (RJ). This equipment is used for training in cargo handling courses and also to help in the knowledge of those who seek to qualify in this sector, school probes were developed, which are structures assembled with the equipment of a probe and simulate the main activities of these professionals. There are already three units installed in the country: at the Federal Institute of Mossoró – RN, at Senai in Salvador – BA, and at Senai de Macaé-RJ.

The city hall of Rio das Ostras created its own professional qualification course at Special Business Zone - ZEN $^{\rm 1}$. In all, in order to offer residents professional qualification for the sector, twenty-four vacancies were offered in the activity of mechanical fitter. But it also offers the platform assistant course. Monthly there are other courses being offered.

Local Content Concepts

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There are several CL concepts in the oil industry area and the same applies to Brazil. The main concepts established in Brazil are found in the researched literature and will be presented next.

According to Law 12.351/2010 Article 2 Item VIII, Chapter II – Technical Definitions, Local Content can be defined as:

The proportion between the value of goods produced and services provided in the country, for the performance of the contract, and the total value of goods used and services provided for that purpose. This Law Provides for the exploration and production of oil, natural gas and other fluid hydrocarbons, under the production sharing regime, in pre-salt areas and in strategic areas.

ANP defines Local Content as the total expenditure on goods and services with national suppliers, in relation to the total spent on a contract or scope of supply (Kamat et al., 2019).

According to the National Organization of the Petroleum Industry – ONIP, Local Content means the added value in the country for the production of a good, system or service.

PROMINP defines Local Content as: Percentage corresponding to the quotient between: the difference between the total commercialization value of a good and the value of its respective imported portion and; its total marketing value.

With the emergence of the ANP Technical Regulations, particularly in the Regulation of Certification Auditors, Local Content (goods):

It is the percentage of expenses incurred in the acquisition of goods, goods for temporary use and local services performed according to the application of the Local Content Booklet in relation to the total expenses of that phase, stage or item of the respective worksheet, attached to the Concession Agreement .

From the concepts mentioned above, one can highlight the purpose of protecting local industries, through the market reserve, as well as keeping part of the investments made in the oil and gas segment within the country, through the implementation of a Policy of Local Content (Rifkin et al., 2015).

Objectives of Local Content in Brazil

In Brazil, local content objectives can be defined, among others, as:

THE ability to promote local supply and the consequent increase competitiveness of the national industry, until it can participate in the market International.

More clearly and explicitly, they aim to:

- Increase the participation of domestic industry in the oil and gas sector on a competitive basis;
- Increase national capacity and technological development;
- Quantitatively and qualitatively increase the qualification of the workforce national;
- Increase local job creation and income. Under the national vision these are the objectives of Local Content, however, from the point of view of other countries, they are considered as follows:

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- In order to reduce the technological deficiencies of Brazilian suppliers, promoting partnerships between foreign Brazilian companies, using the resources of PROMINP and the Petrobras;
- To increase the skill set of the overall workforce and accelerate the job transfer process knowledge;
- To implement the National Professional Qualification Plan PNQP ¹ created by PROMINP, which aimed to increase the number of qualified Brazilian workers in the oil and gas sector to 70,000 workers by 2008;
- To create around 100 000 new jobs in 2010.

For CL purposes they are divided as follows:

In macroeconomic and short term:

- Strengthening of demand directed to the domestic market and expansion of job. With a more specific focus and a long-term perspective deadline:
- Diversification of the industrial park;
- Development of technology-intensive sectors with high potential for growth;
- Construction of defense-relevant segments national.

With incentive to the local industry, in the view of the ANP.

- Increased participation of national industry in the sector on a competitive;
- Increased training and technological development national;
- Increase in professional qualification place;
- Job generation and income.

Additionally, Local Content in the Oil and Natural Gas Industry in Brazil. It considers that the main objectives of the CL are:

- Give competitive conditions to Brazilian companies and encourage the development of technology;
- Resource training humans;
- Generate income and employment country.

It can be said, in short, that all the references mentioned above are aimed at increasing the competitiveness of the national industry and creating jobs.

Methodology

The classification of a research can be based on the model presented by Lakatos (2011), which qualifies in two aspects : in terms of ends and in terms of means.

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As for the purposes, this research will be explanatory. This is motivated by the fact that it is an analysis that seeks to clarify the main concepts and objectives offered by the local content policy.

As for the means, it is a bibliographical research, scientific articles published by Elói Fernández and Osvaldo Pedrosa, so that the methodological foundation of the work is carried out and investigated on the following subjects: Local Content, Benefits of CL in the local industry of goods and services and Local Content Laws (Kamat et al., 2019).

In addition to the bibliographical nature of the research, the definition of field research can be added to this, as there will be a case study and analysis of important data to solve the problem that this work demonstrates in this search.

Case study on the main benefits of local content for industry place

Local Content is the intensity of national investments applied in a given good or service, corresponding to the national industry's participation in the production of that good or service (Mohamed et al., 2011).

Since the first Bidding Round, which took place in 1999, the ANP (National Agency for Petroleum, Natural Gas and Biofuels) has established minimum Local Content requirements in its concession contracts with the winning Operators, for investments made in the exploration and development phases of the production.

Thus, in view of the need to show the concepts and objectives generated by the CL, the Brazilian industry establishes that preference be given to contracting Brazilian suppliers whenever their offers present conditions of price, term and quality equivalent to those of other suppliers invited to present proposals., thus increasing the participation of national industry, on a competitive basis, in oil and natural gas exploration and development projects.

Through a questionnaire, data were collected showing the incentive that the CL provided to the local industry.

Company case study _ _ GNP

The company analyzed in this case study is called PNB, it is a company specialized in engineering projects and underwater construction for the oil and gas industry, of goods and services, with a very strong tendency to acquire equipment and services abroad, since taxes in Brazil are high and many times their suppliers are priceless, so they cannot be competitive. This company is not obliged to set a minimum percentage of CL or even to Certification (Rifkin et al., 2015).

Company case study _ _ PBB

The company analyzed in this case study is called PBB, its headquarters are located in the city of Mogi das Cruzes, close to the greater São Paulo, founded 24 years ago and started its activities in the city of Rio das Ostras (RJ), meeting the needs of the Navigation market and other support activities for Exploration and Production of the Oil Market in the maintenance of Caterpillar Engines, Cummins, EMD, Volvo Penta, MWM, Scania, Perkins, also supplying its Customers with spare parts, aiming to provide its partners your comprehensive solution. In 2008, Garrett

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and HOLSET Turbine Distribution activities began in the state of Espírito Santo in the city of Vila Velha within Greater Vitória (Medeiros et al., 2015).

It is a company that performs, is determined and committed to its customers and employees, in the questions addressed to employees, it claims to be aware of the local content policy, which they do not use, having great difficulty in reaching the minimum CL index, since many of the Sometimes the vessels are built abroad or even when they are built here in Brazil, it is not easy to buy the equipment here in Brazil. Here we have an aggravating factor, which are very high taxes, which makes other countries (China, Germany, Norway and the USA) competitive (Rifkin et al., 2015).

Company case study _ _ OPN

Based on the questions and answers of the company OPN located in Macaé, being an international corporation company that provides communication and information technology to the governmental and commercial markets of more than 125 countries, headquartered in Melbourne, Florida, whose base object of research is located up in Macaé.

In the manager's answers, he explains that he is aware of the local content policy, and does not use the policy since his customers, when closing contracts, are aware that their products are imported and by a single supplier in Huston , therefore, they do not certify . This happens because many times their customers do not certify their services and equipment and do not feel obliged to require the company to use the local content policy.

Company case study _ _ X Y Z

The company analyzed in this case study is called XYZ, is located in Macaé, is of Norwegian origin, has been here in Brazil for over 15 years, operates in the drilling area. The information collected from the manager is relevant for analysis, since the company is aware of and uses the content policy, he reports that Brazil lacks adequate technology, not being competitive in the area, in this situation it is priceless to compete with abroad. The company tries together with its collaborators to develop means to foment the local industry, but it becomes difficult because the demands come from North America and Asia, specifically China and the United States, making its choice based on price and term, these characteristics are easily supplied by these countries. He also comments that it is often more profitable to pay the fine than to reach the minimum CL percentage (Medeiros et al., 2015).

Therefore, it is worth reporting that the content policy is experiencing a major problem and structuring deficiency that affects the competitiveness of the Gas and Oil industrial sector. It is worth highlighting the limitations of government policy, which focused directly on a large portion of the local production base in meeting the demand generated by investments in the oil and gas industry. These limitations weaken the capacity of this policy to instigate the transformation of the sector required to succeed in its objective.

Considerations finals

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Seeking to achieve the objective proposed in this study, concepts regarding local content were researched in the literature and a study was carried out based on the responses of a questionnaire sent to some companies in the city of Rio das Ostras and Macaé.

The information obtained in the analysis of this questionnaire made it possible to perceive that this CL policy lacks centralization and priorities with regard to the segments and products that make up the supply chain of the oil sector. The questionnaire made it possible to identify the relevance of the segment from the point of view of the diversification of the production line and the technological development of the country's industrial park. There is a great demand and the local industry does not have equipment and labor to offer the local industry, which in turn imports these, failing to contribute to the policy of CL.

However, it is concluded that from the government incentive, more educational institutions and industries will specialize in order to offer local companies the appropriate product and specialized labor, avoiding imports and favoring the national economy. And also that the government could better supervise acquisitions made here in Brazil.

References

Asiago, B. (2017). Rules of engagement: A review of regulatory instruments designed to promote and secure local content requirements in the oil and gas sector. *Resources*, 6 (3), 46. https://doi.org/10.3390/resources6030046

Barroso, HR & Macedo, M. (2010). Local Contente in Brazilian Oil Industry. T&B Petroleum. N.28, p. 64-68.

Bourgault, D., Tremblay, H., Schloss, IR, Plante, S., & Archambault, P. (2017). "Commercially Sensitive" Environmental Data: A Case Study of Oil Seep Claims for the Old Harry Prospect in the Gulf of St. Lawrence, Canada. *Case Studies in the Environment*, 1 (1), 1–9. https://doi.org/10.1525/cse.2017.sc.454841

Bresser-Pereira, LC & Marconi, N. (2008). "Is there Dutch disease in Brazil?". Annals of the IV Economics Forum of São Paulo, Fundação Getúlio Vargas: São Paulo, (2008).

Kamat , VR, Le Billon, P., Mwaipopo , R., & Raycraft , J. (2019). Natural gas extraction and community development in Tanzania: Documenting the gaps between rhetoric and reality. *The Extractive Industries and Society* , 6 (3), 968–976. https://doi.org/10.1016/j.exis.2019.03.011

Mancini, L. (2015). Regulatory Environment and Endogenous Technological Development in the Upstream Oil and Gas Industry in Brazil. *Day 1 Tue , October 27, 2015*. https://doi.org/10.4043/26295-ms

DOI: 10.5281/zenodo.4737597



Marconi, MA & Lakatos, EM (2011). *Scientific Work Methodology* . 5. ed. Atlas Publisher, Sao Paulo.

Menin Junior, RF (2017). Responsibility of port terminals for damage to cargo during storage and stowage. *Revista Coleta Científica*, *1* (2), 06–31. https://doi.org/10.5281/zenodo.4735713.

Ramos FS, Fonseca LM, Borges LAL, Sousa JC de, & Almeida SS (2017). Incidence and evolution of the number of cases of bovine tuberculosis in the municipality of Unaí-MG - period 2013-2015. *Revista Coleta Científica*, *1* (2), 01–05. https://doi.org/10.5281/zenodo.7418592

Rifkin, W., Witt, K., Everingham, J., & Uhlmann, V. (2015). Benefits and burdens for rural towns from queensland's onshore gas development. *All Days*, SPE-176941-MS. https://doi.org/10.2118/176941-MS

Mendonça, MF & Vasconcelos, A. (1959). *Repository of Names of Ships of the Brazilian Fleet*. 3rd edition. Rio de Janeiro. SDGM. 1959. p.229.

Medeiros, BB, Coester, M., Reichert, CL, Pezzi, MV, & Baungartner, R. (2015). The challenge of developing talent to meet the offshore and shipbuilding demands in Brazil. *All Days*, SPE-175512-MS. https://doi.org/10.2118/175512-MS.

Mohamed, MA, Soelem, R., Attar, F., & Ozalp, N. (2011). Hydrogen production and utilization in petroleum refineries: A study of the u. S. Oil and gas industry. *ASME 2011 5th International Conference on Energy Sustainability, Parts A, B, and C*, 903–916. https://doi.org/10.1115/ES2011-54752