



ENRICH IN BRAZIL

Enhancing business connections
between Europe and Brazil

Facts & Figures: Get to know Brazil and its
Innovative Industries



ENRICH is an initiative of the European Union, executed in Brazil by the CEBRABIC project, that has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 733531. Responsibility for the information and views set out in this publication lies entirely with the authors.



ENRICH

EUROPEAN NETWORK OF
RESEARCH AND INNOVATION
CENTRES AND HUBS, BRAZIL



TABLE OF CONTENTS



1. <u>INTRODUCTION</u>	5
2. <u>OVERVIEW</u>	7
2.1. <u>Geography and Demography</u>	9
2.2. <u>The North</u>	10
2.3. <u>The Northeast</u>	11
2.4. <u>The Central-West</u>	12
2.5. <u>The South</u>	13
2.6. <u>The Southeast</u>	14
3. <u>POLITICAL AND ECONOMIC CONDITIONS</u>	15
3.1. <u>Political conditions</u>	16
3.2. <u>Economic conditions</u>	17
4. <u>BUSINESS AND RESEARCH OPPORTUNITIES</u>	20
4.1. <u>Automotive</u>	23
4.2. <u>Agribusiness</u>	25
4.3. <u>Bioeconomy & Biotechnology</u>	28
4.4. <u>Information and Communication Technology</u>	31
4.5. <u>Marine Research</u>	32
4.6. <u>Nanotechnology</u>	33
4.7. <u>Renewable Energy</u>	35
4.8. <u>Health and Medical Research</u>	36
4.9. <u>Infrastructure</u>	38
5. <u>OPENING BUSINESS ENTITY</u>	39
6. <u>FUNDING</u>	43
7. <u>VISA REQUIREMENTS</u>	54
8. <u>ADDITIONAL INFORMATION</u>	57
8.1. <u>Do's and Don'ts</u>	58
8.2. <u>FAQs</u>	59
8.3. <u>Useful Links</u>	62



1

INTRODUCTION

INTRODUCTION

Brazil is a beautiful country with abundant breath-taking scenery, ranging from rainforests and wetlands to drylands and endless beaches. This diversity is also seen in the Brazilian cultural aspects: being a mixture of mainly native American, Portuguese, and African peoples as well as decedents of more recent German, Italian, Japanese and even Ukrainian and Polish immigration, the country comprises a plural and eclectic culture. This melting-pot manifests itself through various ways: art, language, music, food, celebrations, in virtually every aspect of the Brazilian life. Although understanding these nuances may seem overwhelming at first, they are also among the most fascinating features about Brazil, and one of the main reasons why people who have contact with the country have long-lasting *saudades*¹ towards it.

Having been a colony of Portugal for more than three centuries, Brazil is the largest Portuguese speaking country in the world, and the only one in the Americas. With its Independence in 1822 and the subsequent Brazilian Empire, the country was able to maintain its huge territory and even expand it, unlike its neighbours. The scenario of relative stability, especially after the 1850's decade, allowed the country to thrive

economically and modernize its infrastructure², attracting immigrants from various countries, especially Italy, Japan, and Germany.

With the abolition of slavery in 1888, and the related proclamation of the Republic in 1889, Brazil took a leap into modernity. This, allied with an enormous population growth (which more than doubled between 1890 and 1920³), created the basis for a strong internal market. Industrial initiatives, utilizing the wealth accumulated by the coffee exports in its favour, were already present as early as the 1920's⁴. The subsequent decades showed a consistent increase in the industrial sector participation in GDP, jumping from 25% in 1950 to almost 48% in 1985⁴, establishing some of the most important sector of Brazilian industry, such as automotive and petrochemical, energy production and distribution, mining and agribusiness.

Besides that, the agricultural sector, core of the Brazilian economy since the colonial times, has improved vigorously. Searching an alternative to efforts concentrated in single commodities, such as sugar-cane, coffee, or rubber (in the so-called 'economic cycles'), Brazil was able to highly diversify its primary-sector production. With the usage of technology and machinery, it became

a world-class exporter of agricultural goods such as soy beans, poultry and bovine meat, and cellulose, among others. Likewise, its mining and oil industries are two of the backbones of Brazilian exports, representing more than 17% of its total exports in 2016⁶. The services sector shows, however, the largest share of the country's GDP, reaching around 73% in 2015⁷. While still lower than the figures seen in some more developed countries, it is considerably higher than the average seen in middle-income countries (57.8%), what may represent a process of early de-industrialization.

This challenge has, however, its silver-linings. With a market of almost 210 million people, a long-history of excellence in agricultural processes, as well as an abundant resource endowment and technology in core sectors, Brazil still has a huge potential to be explored. The union of the country's best qualities, inclusively science, technology and innovation, with successful practices from European entrepreneurs, researchers, and other institutions can be of great value to all sides. The examples of companies like Volkswagen, Robert Bosch, Renault, Fiat or Santander can easily state that – after all, one can miss a country because of its beautiful beaches and friendly people, but feeling *saudades* is deeper and encompasses the whole Brazilian experience.

References:

- ¹ To feel *saudades* mean to miss something in a dearly way. This word just exists in Portuguese, with no translations that comprise its complete meaning.
- ² Barman, R. J. (1999). *Citizen Emperor: Pedro II and the Making of Brazil, 1825–1891*. Stanford: Stanford University Press.
- ³ IBGE: *Instituto Brasileiro de Geografia e Estatística*.
- ⁴ Mello, J. M. C. (1991). *O Capitalismo Tardio*. São Paulo: Brasiliense.
- ⁵ IPEADData.
- ⁶ UN Comtrade.
- ⁷ World Bank.

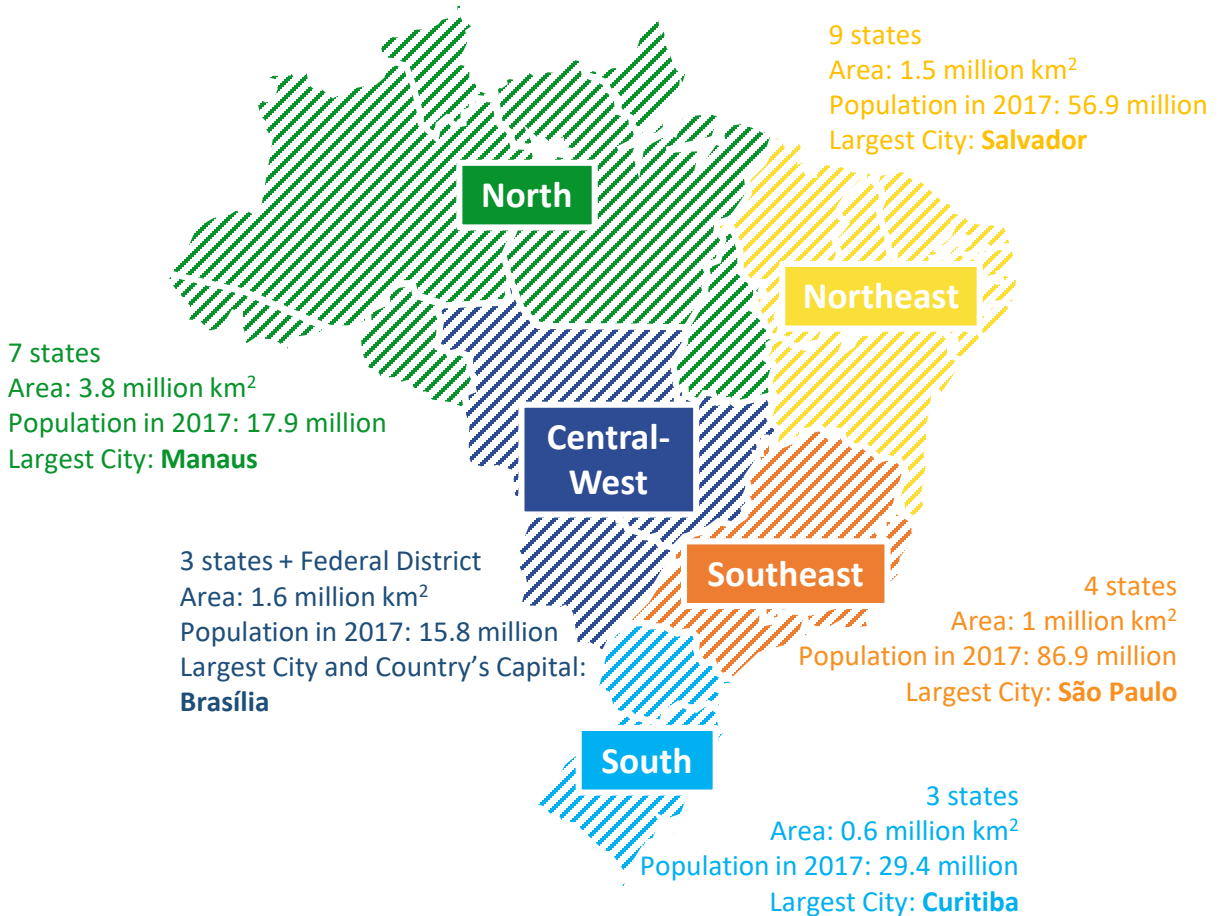
ABOUT THIS REPORT

The ENRICH in Brazil Report “Facts & Figures: Get to know Brazil and its Innovative Industries” has been prepared to provide an overview of Brazil and its business milieu. It gives general information about the country classified by its regions as well as information on cultural, political, economic, and financial conditions. Moreover, it provides more detailed knowledge on Brazil's most relevant industries.



2

OVERVIEW



Brazil has a vast territorial space with varied and diverse culture, divided into **27** administrative units, including one Federal District. The states can be geographically grouped into five regions: **North**, **Northeast**, **Central-West**, **Southeast**, and **South**. Each region is culturally and economically distinct, leading them to be one of the essential factors to be studied before establishing a business in the country.

GEOGRAPHY & DEMOGRAPHY

- Brazil is the fifth largest country in the world by total area, and sixth by population (as of 2018)¹
- Brazil has borders with all South American countries, excluding Ecuador and Chile
- Its largest cities in population are São Paulo (largest city in the Southern hemisphere), Rio de Janeiro, Brasília and Salvador
- The country has a high urbanization rate, with more than 84% of its population living in urban areas²
- Its arable land comprises 9.6% of the country's total area, figuring among the largest in the world³
- Brazil has a growing Economically Active Population (PEA), jumping from 55.3% of its total population in 2004 to 64.8% in 2015⁴
- Citizens in Brazil are free to follow whichever religion they choose, but the vast majority of its population consider themselves Christians, with 65% of total population composed of Roman Catholics, and 22% of Protestants²
- Inequality figures have consistently declined throughout the last decades, with its Gini index falling from 63.3 in 1989 to 51.3 in 2015³
- Brazil's poverty reduction is also noticeable. People considered to be in poverty situation fell from 24.7% of total population in 2001 to 7.4% in 2014³

Total: **8 514 877 km²**

Land: **8 459 517 km²**

Water: **55 460 km²**

Coastline: **7 491 km**

Arable land: **812 114 km²**

Population in 2018 (estimated): **209 million¹**

Economically active pop: **64.8% (2015)⁴**

Gini Index: **51.3 (2015)³**

References

¹ IBGE: *Projeção Populacional*.

² IBGE: *Censo demográfico 2010*.

³ World Bank Data.

⁴ IBGE: *Pesquisa Nacional por Amostragem de Domicílios (PNAD)*, 2005 and 2015.

THE NORTH

The North of Brazil (*Região Norte*) is composed of seven states: Acre, Amapá, Amazonas, Pará, Rondônia, Roraima, and Tocantins. It is the largest in area, comprising 45% of the country's total area, and is home to the Amazon rainforest and its huge biodiversity, as well as the Amazonas River, the second longest in the world.

Culturally, this region shows a strong influence of native American peoples, which can be found in local delicacies such as *tacacá* and *maniçoba*, dance styles such as *carimbó*, and folkloric festivals, being the most prominent one held yearly in Parintins, Amazonas. This mixture is also seen in the North's ethnicity, with more than two thirds of the population declaring themselves as *pardos*¹.

Despite its enormous area, the North is the region with the smallest population density in Brazil, with only 4.6 inhabitants per square kilometre. This makes the region the second less populated, with 17.9 million inhabitants. Although less concentrated than some other regions, 70% of this population resides in Amazonas and Pará, mainly in their capital cities, Manaus and Belém.

In the case of Manaus, part of this concentration can be explained by the presence of the *Zona Franca de Manaus (ZFM)*, an industrial zone that offers economic incentives to companies installed there. Created with the objective of pushing the development process in the region, the ZFM generates around 120 thousand direct and 600 indirect job positions, in more than 700 companies from sectors such as electronics, chemical and metal-mechanic².

The region's share in Brazilian GDP is of roughly 5.4% (2015), being the less representative among all regions. Although energy is abundant due to the presence of several hydroelectric powerplants, one of the infrastructural challenges in the North comes from transport: fluvial transport is easily available, but the restricted road and railroad infrastructure limit its economic potential. Excluding the ZFM, the industrial sector is limited, with the main economic activities executed elsewhere being mostly concentrated in agricultural products such as soybeans and native species (guaraná, cassava, cocoa), and livestock. Mining activities, especially in Pará, are also an important source of wealth, due to the enormous endowment of minerals.

¹According to IBGE, *pardos* are people with a mixed ethnic ascendance. It comprises every mixture of African, native American, and European peoples.

² *Suframa (Superintendência da Zona Franca de Manaus)*.

THE NORTHEAST

Nordeste, Nordeste. The Northeast Region of Brazil is not only the very beginning of what today is known as Brazil, but also one of the most diverse in terms of culture and geography. Composed by nine states (Alagoas, Bahia, Ceará, Maranhão, Piauí, Pernambuco, Rio Grande do Norte, and Sergipe), its natural beauties have many faces, from the amazing beaches found in every state to the drylands (*sertão*) and gems like the *Chapada Diamantina* and the *Xingó* canyon.

This alone would be sufficient to drive a huge tourism industry. Incredibly enough, it is not the best that the Northeast has to offer. The *nordestinos*, name of its inhabitants, are among the most friendly and open Brazilians, and would not think twice to invite anyone to enjoy a *tapioca* or dance some *forró*.

While some sociocultural traits can be found in every part of the region, each has its own specificities, with areas such as Bahia showing a stronger Afro-Descendent influence, while Pernambuco leans more to the Portuguese side, effects of their historical development. Population-wise, the region is home to more than 57 million people, making it

the second most populated in the country, with a population density of 36.4 inh./km² (which are however, mostly concentrated in the coastal areas).

The Northeast has the third largest share in Brazil's total GDP, with 14.2% (2015). While tourism is an important economic activity, the industrial presence in the region augmented considerably in the last decades, especially in hubs like Suape (Pernambuco) and Camaçari (Bahia). Their main activities comprise the shipbuilding, automotive, and petrochemical sectors. Likewise, the adoption of new technologies, notably irrigation, enabled the expansion of agricultural activities and the overcoming the harsh terrain and climate conditions. The main crops are sugar cane, soybeans, cotton, and cashew, supplied to both international and domestic markets.

The presence of several ports and geographical position makes the Northeast a strategic region. Its smaller distance to important commercial partners, such as Europe and the US, allied with a proper airport and roads infrastructure, facilitates exports and imports. The availability of railroads, whereas still somewhat limited, is also growing, with projects like *Transnordestina* already in course. The region's economic importance tends to keep growing, with positive impacts to Brazil and all *nordestinos*.

THE CENTRAL-WEST

The Central-West (*Centro-Oeste*) is, geographically and politically, the core of Brazil. Composed of three states (Goiás, Mato Grosso, and Mato Grosso do Sul) and the Federal District, it is the country's second largest region, with 1.6 million km². In addition to Brasília and its famous modernist architecture, the region has astonishing lesser-known beauties, such as the *Pantanal* wetlands and innumerable caves and waterfalls.

Located mostly in a geographic plateau, the Central-West shows an economic activity with deep roots in agricultural and livestock breeding, influencing the general culture of the area. Being the region where every other region of Brazil 'meet', each state has its own particularities, but it is not hard to see people dressed as a Brazilian version of cowboys at themed parties even in the largest cities. These traits are easily noticed in the most influential music style of the area, *sertanejo*.

Despite its enormous area, it is Brazil's less populated region, with 15.8 million inhabitants (2017), and a population density of 9.87 inh./km². As usual, these are strongly concentrated in the largest cities, with Brasília alone

being home to more than 3 million inhabitants.

Economically, the region is responsible for 9.7% (2015) of Brazil's total GDP. With a limited industry participation, mainly concentrated in Goiás, its main activities are focused in the primary sector. The north of Mato Grosso is responsible for the largest production of soybeans, corn, and cotton in Brazil, whereas the whole region features an intense participation of livestock products in its economic activities. Brasília, due to its unique characteristic (a planned city with strict rules regarding the establishment of industrial parks), has its main economic activities focused on services, in both public and private sectors.

Its infrastructure, though still lacking in some areas, has showed a constant improvement over the last decades, in line with the region's increasing economic importance. Besides roads linking Brasília to many other states, Goiás has a strong highway network and the region makes use of its fluvial possibilities, with the main port located in Corumbá (MS).

THE SOUTH

The South (*Região Sul*), although larger than metropolitan France, is the smallest region of Brazil, with 0.57 million km². Divided in three states (Paraná, Rio Grande do Sul, and Santa Catarina), it features particular attractions that range from the world-known *Cataratas do Iguaçu* to snowy winters in the highlands of Santa Catarina, as well as white sand beaches in the state's capital city, Florianópolis.

Bordering Argentina, Uruguay, and Paraguay, the region's culture resembles some aspects seen in its neighbors, especially in Rio Grande do Sul. Sharing a *chimarrão* (mate hot tea) and making barbecue are a must in the area, and the most important ways to socialize with family, friends, and do business. Likewise, the large immigration of Europeans during the XIX Century, mainly from Italy and Germany, can be easily noticed in the region's architecture and language, in cities like Pomerode (SC) and Gramado (RS).

With a population of almost 30 million, the South is the third most populous region in Brazil (51.9 inh./km²). However, unlike other regions, its

population is more equally divided between urban and rural areas, with the only cities larger than 1 million inhabitants being Curitiba and Porto Alegre.

The South has the second largest share in Brazil's GDP, with 16.8% (2015). Although livestock goods comprehend most of its primary production, agriculture is the subsector that creates the largest number of jobs, due to the presence of smaller family farming properties. The main crops are corn, beans, potatoes, and apples, whereas larger, commercial farms produce mainly soy and wheat.

The region's industrial sector is the second most important in Brazil. With a good network of transport and available energy, its industries are well distributed along the whole region, with some important hubs located close to larger cities. The highlights are the metropolitan regions of Curitiba and Porto Alegre, with important industries from the automotive sector, as well as the north of Paraná and the *Vale do Itajaí* region in Santa Catarina, with their textile industry. The services sector is also prominent and shows a growing perspective, similar to the rest of Brazil. Its main highlights are the ports of Paranaguá (PR), Itajaí (SC), and Rio Grande (RS), as well as software companies in Blumenau and Joinville (SC).

THE SOUTHEAST

If Brazil is a multicultural country per definition, **the Southeast** (*Sudeste*) is possibly the pinnacle of this diversity. Composed by four states (Espírito Santo, Minas Gerais, São Paulo, and Rio de Janeiro), the region is Brazil's second smallest (0.9 million km²). Its relatively small size concentrates and evidences this multitude of facets, which range from the world famous Rio to the baroque-styled cities in Minas Gerais and the São Paulo metropolis.

Being by far the most populated region (86.9 million inhabitants, with a density of 96.5 inh./km²), the Southeast aggregates immigrants from all over the country. Immigrants from all over the world are also present, with a high population of Italians, Japanese, and Lebanese descendants seen in São Paulo, Portuguese and Swiss in Rio, and German in Espírito Santo. The shared culture outpaces the differences, though: it is not hard to see a Japanese-looking person eating *feijoada* and drinking *caipirinha* and speaking with a typical *carioca* accent, along with their peers as multifaceted as themselves. After all, that is what being Brazilian is about.

The Southeast accounts for roughly

54,0% (2015) of Brazil's GDP, being the strongest and most diversified economic region of the country. This concentration is not by chance, but rather historically constructed, since Rio was the former Brazilian capital, and Minas Gerais and São Paulo were the center of the so-called gold and coffee cycles, respectively.

The economic opportunities seen in the region were the main cause of its population expansion, which was accelerated during the industrialization process of the XX century, especially in São Paulo. This region is the most industrialized in the country, with companies from diverse sectors (petrochemical, automotive, naval, electronics, pharmaceutical, metal-mechanic, mining, among others) installed in all states, in varying degrees. Its agricultural production is also extremely important, for both domestic and export sectors - notably sugar cane, used to produce ethanol, soybeans, and oranges. A robust transportation network allows the production to quickly reach its destination, domestically or through ports like Santos (SP), Rio de Janeiro, or Vitória (ES). Also, with the largest universities in Brazil, the region is home to several knowledge creation centers. This is reflected in the number of highly-technological hubs installed in the region, with the most prominent example being Sirius, a fourth-generation synchrotron light source, currently being built in Campinas (SP).



3

**POLITICAL AND ECONOMIC
CONDITIONS**

POLITICAL CONDITIONS

After more than two decades of authoritarian governments, democracy was established in Brazil in 1985. With the new Constitution of 1988, the country started a new period in its history, with its democratic institutions strengthened. Based on a presidential representative framework, the Federal Republic of Brazil has its president as head of state and of government (executive power), as well as two chambers in the legislative power (Senate and Deputies). The judicial power complements the tripartite federal government.

The redemocratization was an important step towards a government framework adequate to current times. However, economic problems persisted, especially huge inflation rates, problem that would be solved just in 1994 with the introduction of *Plano Real*. The success of these measures allowed the further consolidation of Brazil as a democratic country, with direct elections to its representatives held each 4 years, in a multiparty system.

From 1995 to 2002, the federal government took significant steps to modernize Brazil's economic framework, implementing policies

based on the so-called macroeconomic tripod (inflation targets, a floating exchange rate, and primary surplus).

These measures were able to maintain agents' confidence in Brazil's economic path, and avoided the return of uncontrollable inflation rates. With a change of government in 2003, this structure was conserved, allied with the implementation of socially-focused policies, such as the well-known *Bolsa Família* program and minimum wage appreciation measures.

These, allied with the economic growth seen in all emerging countries (in part due to the commodities prices boom seen in the period), were able to create a decade of political stability and improve several socioeconomic indicators. Being just slightly affected by the financial crisis of 2008, Brazil was able lowering social inequalities and keep a decent growth rate throughout the period.

The limits of such policies, however, were seen from 2013 on. Growing inflation rates and a slowing economic activity brought an unstable scenario to former president Dilma Rousseff, who was impeached in 2015. Her successor and current president, Michel Temer, took over the government and proposed reforms regarding critical aspects of Brazilian economy. Among these, measures to impose government expenditure limits, flexibilize labour markets rules, and an

overhaul of the pension system were discussed. While it is generally consensual that reforms in these areas are needed, the lack of popular participation in the decisions and their rather rushed nature undermine their legitimacy. As of 2018, reforms concerning government expenditure limits and labour markets have been approved, and the pension system one, possibly the most controversial, is still under discussion.

The scenario of scepticism towards the traditional political institutions is currently widespread in Brazil. With presidential elections being held in October of 2018, this might change, though. Expectations of resuming the growth path seen in the 2000's lead to the search of alternatives to the country's current issues, both from the candidates and the population perspectives. Most important is the maintenance of functioning and healthy democratic institutions, fundamental condition to achieve the desired goals.

ECONOMIC CONDITIONS

This panorama of political uncertainty in Brazil is fundamentally associated with the country's economic performance in the last years. After a decade of an average economic growth of 3.8% per year (2003-2013), even peaking at 7.5% in 2010, the country faced a strong economic slowdown in 2014, which turned into a sharp recession in 2015 and 2016 (-3,5% in both years). However, a slight recovery of 1% in 2017, and forecasts of 2.3% and 2.5% in 2018 and 2019¹, respectively, show that the Brazilian economy is slowly recovering, along with other indicators. As of 2018, Brazil is the ninth largest economy in the world.

One of the biggest challenges faced concerns the persisting high unemployment rates, which jumped from 6.7% to 12.9% in three years (2014-2017) and are projected to stay at two-digit levels until as long as 2019². Related to that, the rate of utilization of industrial installed capacity still shows a timid recovery, with 22.1% of idle capacity seen in April/2018³, what obstructs new investments and hinders the possibility of a growth trajectory based on this variable at the moment.

This unsatisfying performance strongly

3.1 | Political and Economic Conditions

reflects in Brazilian's fiscal capacity. The substantial drop in its product led the country's government gross debt/GDP figures to shoot up from 62.3% in 2014 to 84% in 2017¹. The same trend is seen in its fiscal results, which consistently deteriorated in the period (with constant primary deficit seen from Nov/2014 on, and a headline fiscal balance of 7.8% of total GDP in Dec/2017)⁴.

On the silver linings side, the weak economic activity slowed down the rising inflation, with an *IPCA* of 3% in 2017⁴, considerably below the Central Bank's target (4.5% per year). The forecast for 2018 is an inflation of around 4%⁵, which is a pretty significant result, considering the strong depreciation faced by the Brazilian Real against the US dollar during the first five months of 2018 (around 13%).

The lower inflation rate allowed the Central Bank to greatly drop Brazil's basic interest rate (*SELIC*), from 14.25% in the third semester of 2016 to 6.50% in the second semester of 2018, its historic minimum⁴. On a longer term, the maintenance of lower interest rates should impact positively the deteriorated government debt figures.

While it may hurt some industries that depend on imports, the currency depreciation shows advantages to exporters, increasing the competitiveness of Brazilian products

in the international markets. A similar effect was seen in the previous years, with the trade balance surplus going from 19.7 billion dollars in 2015 to 66.9 billion dollars in 2017⁶, in part result of the currency depreciation in the period.

The recession impact in Brazil was harsh, and the country still suffers its aftermath. Nevertheless, the economic indicators show a slow but sure recovery, which can be intensified by the right policies. The political situation plays a huge role in this scenario, and the constitution of a government democratically elected is a must. With a more stable scenario and well-thought and discussed measures, Brazil will be able to keep improving and maintain its strategic position in the world economy.

References

¹ IMF: World Economic Outlook (April 2018).

² International Labour Organization (ILO): World Employment and Social Outlook: Trends 2018.

³ *Confederação Nacional da Indústria (CNI)*.

⁴ *Banco Central do Brasil*.

⁵ *Ata do Comitê de Política Monetária, Maio/2018*.

⁶ UN Comtrade.

GROSS DOMESTIC PRODUCT

The Brazilian Ministry of Finance has forecasted for 2018 a GDP growth of 2.5%.

Year	GDP Growth Rate
2012	1.9%
2013	3.0%
2014	0.5%
2015	- 3.8%
2016	- 3.6%
2017	0.5%
2018	2.5%

LABOR MARKET

The government seeks to translate the ongoing economic recovery to the labour market by the current labour tax reform. This reform will reduce labour costs hence increase Brazil's employment rate.

Year	Unemployment Rate
2015	8.3%
2016	11.3%
2017	13.2%

MONETARY POLICY

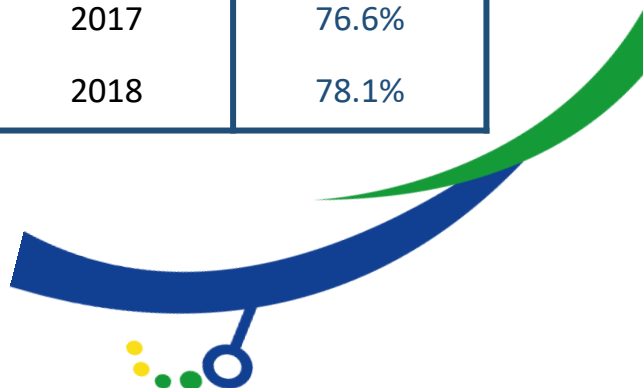
The monetary policy of easing cycle has achieved substantial and generalized inflation reduction and it will be the key to the economic recovery of Brazil.

Year	Inflation
2015	10.7%
2016	6.3%
2017	4.5%

FISCAL POLICY

Brazil is aiming to improve the quality of its government expenditures. The public expenditure is frozen in real terms for the next 20 years. In preparation for the demographic shock, the Social Security and Pension reform was submitted for the approval by the National Congress.

Year	Public Debt
2017	76.6%
2018	78.1%





4

BUSINESS AND RESEARCH OPPORTUNITIES

BUSINESS & RESEARCH OPPORTUNITIES

Brazil as the largest Latin American economy and the ninth largest in the world has a relatively diversified economy. It has abundant natural resources, a relatively large service sector, a broad and deep domestic market and well-established industries.

The industrial sector which accounts for 21%¹ of the GDP (2016) ranges from advanced manufacturing (automobiles, aircraft, petrochemicals, steel, consumer durables, construction materials) to high-tech equipment. The market is a home to multinational enterprises as well as successful domestic firms. With the realization of the “Real Plan” (1994), which introduced the current currency, businesses have regained trust in the economic stability of the country and have largely invested in production machinery, equipment's and technology.

On the other hand, the diverse and sophisticated service sector (hospitality, IT, financial, personal and professional, retail) is the main contributor to the Brazilian economy representing 73%² of the national GDP (2016). Even during recent crisis this sector was continuously getting foreign investments. Both business and government service sectors are the biggest employers of the country.

However, commodities still play an important role in the country's economy.

Although the agricultural sector, for instance, was recorded at 5.5% of GDP (2016), Brazil has become one of the most competitive and largest exporters of orange, soybean, coffee, sugar, corn, wheat, meat and etc. The driving force behind this success was the continuous and strong focus on the sectoral innovation – namely, agribusiness is accompanied with innovative technologies which provide a higher crop rate. The recent policy adjustments, moreover, are directed at fostering such innovation technologies that are sustainable and environmentally friendly since the agribusiness coupled with extraction and production with other commodities (iron ore, aluminium, forest products, oil and gas) rises serious concerns in the global trade due to environmental issues. Provision of pasture, cropland and production of timber are direct causes of deforestation.

Brazil is also known for its oil and gas and energy production. In 2016, it had the second-largest identified crude oil reserves in Latin America and it is the second largest ethanol producer in the world. Major players in the energy sector are the state-owned companies – Petrobras and Eletrobrás. Brazil also has a strong commitment to renewables with hydroelectric sources accounting for the largest share.

References

^{1,2, 3} World Bank

Concerning research and innovation (R&I), Brazil has undergone several structural changes lifting its focus from science base mainly to supportive system of business research and development (R&D). Its impact can be also seen in the development of research. Over the course of last 20 years, research has started shifting from theoretical to more applied and innovation-oriented fields.

It was during the first administration of President Lula (2003–2006) that a real impetus towards explicit policies took place. In 2003, the federal government launched the Industry, Technology and Foreign Trade Policy (PITCE), an industrial policy plan, and the National Plan for Science, Technology and Innovation (PNCTI). In this period, two important laws providing for fiscal incentives and subvention (subsidies) for R&D and innovation were also enacted by the Brazilian congress. The first was the 2004 Lei da Inovação (Innovation Law), which, among other things, allowed for public procurement of (pre-competitive) R&D that aimed to develop a solution for a specific technical problem or an innovative product/process. The second law was the 2005 Lei do Bem (Law of Good), which implemented the previous proposal of tax incentives for R&D.¹

PITCE and PNCTI were replaced with new industrial and STI plans in 2007–2008, following President Lula's re-election: the Productive Development Policy (PDP), and the Action Plan for Science Technology and Innovation

(PACTI). Lula's mandate was followed by the government of President Dilma Rousseff (2011–2014), which also established two new strategic plans: the Plano Brasil Maior (PBM – 'Greater Brazil Plan') and the National Science, Technology and Innovation Strategy (ENCTI). The new ENCTI 2019 was launched in 2016 by Rousseff before her impeachment and subsequent government of the new President Michel Temer.²

The national STI strategy targets several R&D areas which align with global STI trends:

- climate change
- reduction of the impact of natural disasters
- sustainable energy
- marine research
- sustainable urbanization
- social issues such as the gender inequality and ageing population
- digital economy
- technological convergence
- enabling technologies
- food supply and security
- information society³

References

¹ Amorim, C. (2010). Brazilian foreign policy under President Lula (2003-2010): an overview. *Revista brasileira de política internacional*, 53(SPE), 214-240.

² Mazzucato, M., Penna, C. (2016) The Brazilian Innovation System: A Mission-Oriented Policy Proposal. Centro de Gestão e Estudos Estratégicos, Brasília.

³ JRC Science for Policy Report: RIO Country Report 2015: Brazil (2016)

AUTOMOTIVE

Automotive is the largest industrial sector (23% industrial GDP) and is responsible for 5.5% the total Brazilian GDP. As of 2013, Brazil was the world's 8th largest automotive producer (3.7 MM) and had the 6th largest market for light vehicles. Although the numbers have fallen during economic crisis, the industry is regaining its strength in recent time not only due to the economic health of the country but also due to the significantly increased export share (36% in 2017 compared to 2013) which was a reaction to the depreciating Real.^{1,2}

The industry comprises automobiles, light vehicles, trucks, buses and agricultural machines and is regulated by ANFAVEA, the Brazilian Association of Motor Vehicle Manufacturers, which is part of the International Organization of Motor Vehicle Manufacturers (OICA).

World's leading motor vehicle manufacturers are present in Brazil (e.g. Volkswagen Group, Ford, General Motors, Nissan Motors, Toyota, Mitsubishi, Mercedes-Benz, Renault, Honda, Hyundai, Fiat Chrysler Automotive, BYD, Volvo, BMW, etc.).

From the home-grown producers, Troller is considered to be the most

successful by serving a share of Latin American and African markets.

Besides being well-established and highly developed in the automotive manufacturing, Brazil has proven its competitiveness in engineering and design of automotive. Many international firms chose Brazil for their R&D centres and design teams. For instance, Toyota established one of its few applied research centres in São Bernardo do Campo, whereas Nissan created a strong design team in the heart of Rio de Janeiro with an aim to study and adjust to the local preferences in no-time.

In order to incentivize foreign investments as well as to further increase export rates of Brazilian automobiles both improvements in free trade policy and planned revision of the "Inovar-Auto" with a new, less protectionist policy called "Route 2030" are foreseen. The Inovar-Auto programme was developed to encourage production of more efficient, safer and technology-advanced vehicles by managing taxation exceptions (IPI: industrial products tax).³ However, it received critiques in regards to implicit protectionism. The overhaul of this policy, Route 2030, is aimed to continue to foster innovation and efficiency but remodel the IPI taxation. This radical change is seen to be favourable for electric vehicles.

References

¹ BCB: The Central bank of Brazil (<https://www.bcb.gov.br/pec/Indeco/Ingl/indecoi.asp>)

² IBGE: Brazilian Institute of Geography and Statistics

³ https://www.theicct.org/sites/default/files/publications/ICCTupdate_Brazil_InovarAuto_feb2013.pdf

The production volume of vehicles has decreased during the recent economic crisis. However, it is starting to regain its strength thanks to positive industry policies, trade agreements and overall economic health of Brazil.

Year	Vehicle Production		Export
2013	3 712 736	9.1% ↑	565 111
2014	3 146 194	15.3% ↓	334 219
2015	2 419 021	23.1% ↓	417 332
2016	2 176 784	10% ↓	516 568
2017	2 699 167	24% ↑	766 013

Revenue incl. auto parts (2015): ²

USD **59.1 Billion**

Exports incl. auto parts (2016):

USD **17.9 Billion**

Investment incl. auto parts (1994/2012):

USD **68 MM**

Imports incl. auto parts (2016):

USD **17.9 Billion**

Assemblers: **31**

Auto Parts: **616**

Dealers: **5 592**

TOP vehicle producers and OEMs are active in different segments of automotive industry of Brazil.

Busses	Trucks	Passenger Cars	Light Commercials
MAN	MAN	Volkswagen	Volkswagen
Mercedes-Benz	Mercedes-Benz	Peugeot Citroën	Peugeot Citroën
Scania	Scania	Ford	Ford
Volvo	Volvo	Fiat	Fiat
Agrale	Agrale	Renault	Renault
Iveco	Iveco	Nissan	Nissan
International	International	General Motors	General Motors
	CAOA	Mahindra	Mahindra
	Hyundai	Hyundai	CAOA
	DAF	Toyota	Iveco
	Ford	Honda	Agrale
		Mitsubishi	Mitsubishi
		BMW	

References

¹ BCB: The Central bank of Brazil (<https://www.bcb.gov.br/pec/Indeco/Ingl/indecoi.asp>)

² ANFAVEA: Brazilian Automotive Industry Year Book 2017

AGRIBUSINESS

Agribusiness is a vocation for Brazil as the country has a geographic diversity, one of the largest arable land areas, suitable climate characteristics as well as the largest resource of fresh water. The Brazilian agricultural sector has seen a radical transformation from traditional to research and technology based innovative system of production.

Regardless of recent economic crisis, Brazil keeps its power in the agribusiness. This sector had the highest growth rate in the last decades. When the whole economy was contracting in 2015, this economic sector was the only one to expand and reach a growth rate of 1.8%. This was due to the innovation and technological development, efficient policy and industry management and long-term investments in agricultural research. All of this facilitated the country to become one of the largest agricultural producers surpassing the U.S. in certain crop types.

Brazilian agricultural sector comprises 6.9% of the global trade alone. The country is well-known for the scale of its meat production and export as well. However, domestic consumption of meat accounts for around three fourth of the total meat production (chicken, pork, beef).¹

In regards to the rapidly growing world's population, Brazil has the potential to play a leading role in the food supply. In 2050, it is expected that the world's population will reach 10 Billion. This will impose a serious challenge for all countries as the global agricultural output needs to increase by 60%.² According to the World Bank in 2015, 34% of total land was in agricultural use. The savannah and prairie regions are potential areas for expansion. Brazil is an example of tropical agriculture with increasing adoption of foreign crops.

The growing demand for food will not only affect the agricultural sector and other sectors such as energy, but it already inflicts serious burden on the surrounding and global environment and world climate. This is also one of the main challenges for agribusiness as the government is working vigorously towards designing and implementing rules and policies to ensure sustainable growth and environmental protection.

References

¹ USDA: United States Department of Agriculture 2015/2016; AgroStat 2015

² FAO: Food and Agricultural Organization of the United Nations

TOWARDS SUSTAINABLE AGRIBUSINESS

The Action Plan for the Prevention and Control of Deforestation in the Legal Amazon

Policy series against deforestation with a focus on (a) monitoring and law enforcement, (b) territorial management and land use, and (c) promotion of sustainable practices.

Brazilian Forest Code

This Forest Code regulates land use and limits the scale of deforestation by constituting areas that must be preserved within private properties.

Cadastro Ambiental Rural

The Environmental and Rural Registry established as an environmental regularization system that uses georeferencing to record limits of private properties and state of protected areas (PA).

National Plan for Low Carbon Emissions in Agriculture

The Low-Carbon Agriculture Programme was developed to hit global target carbon emission level while fostering growth in the agribusiness. It provides farmers subsidized rural credits for adapting a Direct Planting System.

For centuries agricultural development was based on a central idea of the so-called “*extrativismo*”, which stands for extractive land use. This method is used for various agricultural and forest businesses such as timber, crop, nuts production, provision of pasture land, hunting and fishing. It entails numerous negative impacts on the environment: soil erosion, endangerment of biodiversity, carbon emission, deforestation and so on. Agricultural activities are the main cause for deforestation. However, with the economic prosperity of the country road construction, urbanization, population growth, mining and dams accelerated deforestation process.

Today, Brazil has the world’s largest PA system covering nearly 12.4%¹ of the global total. From the Brazilian territory 17.20% of terrestrial and inland water areas, 1.5% oceanic areas² and 13.2% of indigenous lands³ are under protection. The PA are classified into three main categories: strictly protected, sustainable use and indigenous land.

PPCDAm, the Action Plan for the Prevention and Control of Deforestation in the Legal Amazon, was a stepping stone towards combating deforestation.

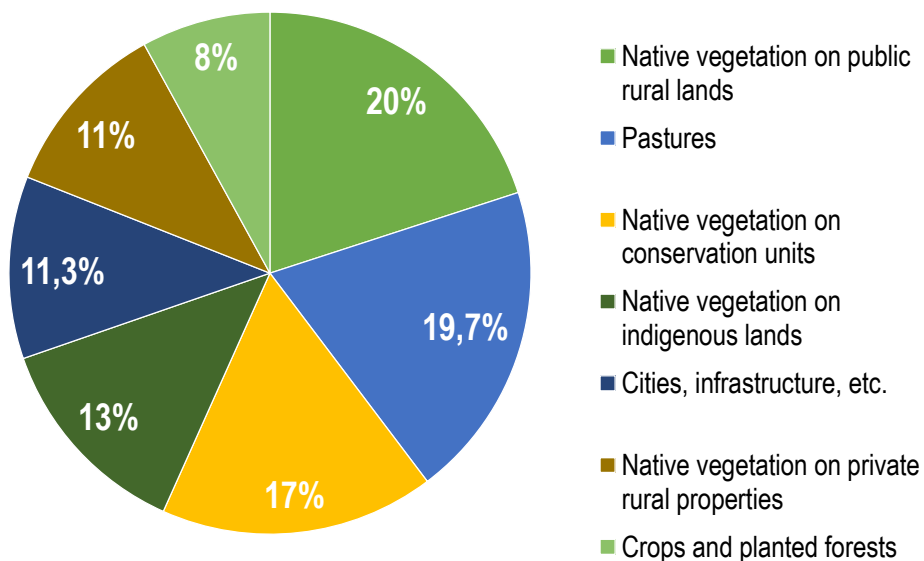
References

- ¹ Ferreira, J., Aragão, L. E. O. C., Barlow, J., Barreto, P., Berenguer, E., Bustamante, M., ... & Pardini, R. (2014). Brazil's environmental leadership at risk. *Science*, 346(6210), 706-707
- ² [Ministério do Meio Ambiente, 2015](#)
- ³ [FUNAI, 2015](#)

1

Product	Production Global Ranking	Export Global Ranking	Share of Domestic Consumption
Coffee	1	1	29%
Sugar	1	1	31%
Orange Juice	1	1	5%
Beef	2	3	86%
Soybeans	2	1	24%
Chicken meat	3	1	68%
Maize	3	2	63%
Pork	4	4	85%

LAND USE IN BRAZIL²



Native Vegetation
61%

Rural Properties
38.7%

Urban Use
38.7%

References

¹ USDA: United States Department of Agriculture 2015/2016; AgroStat 2015

² Embrapa

BIOECONOMY & BIOTECHNOLOGY

Bioeconomy uses renewable biological resources from land and sea to produce food, materials and energy. Its aim is to simultaneously provide innovative and low-emissions economy that fosters sustainable agriculture, fishery, food security, renewable energy production and biodiversity and environmental protection.¹ It emerged as a response to global issues such as: climate change and global warming, rapid population growth, projected food scarcity, depletion of non-renewables and demand for environmentally friendly low-cost production systems.

For decades, production and consumption of ethanol was one of the successful biotechnological commodities. The Brazilian bioethanol industry is now the second largest in the world accounting for a quarter of total domestic fuel consumption. The country has a well-established innovative agricultural sector, strong background in tropical agricultural research, biodiversity, high-ranking academic sector and a well-structured business flora, all of which represent a promising foundation for a successful bioeconomy.

National policy that facilitates development of biotechnology and biosciences was introduced in 2007. After further independent development of bio-based industry products, the Brazilian National Confederation of Industry (CNI) has launched an annual Bioeconomy Forum.

The current focus of Brazilian bioeconomic policy is set on biopharmaceuticals, agricultural biotechnology, animal and industrial biotechnology. The industry itself is aiming to improve product and process innovation. Hence, R&D projects, science infrastructure, funding, human resources and legal environment are the key enabling factors.²

The development of bioenergy and biotechnology is the responsibility of Ministry of Mines and Energy and Ministry of Development, Industry and Foreign Trade of Brazil respectively.

3

Example of Scientific and Technological Bioeconomy Elements

- Sustainable production of biomass for nutrition and industrial purposes
- Extraction of plant ingredients
- Transformation of sugar, vegetable oil and lignocellulose to platform chemicals
- Processing to bio-based fine, specialty and bulk chemicals including energy carriers
- Cascade use of processing material flows
- Use of CO₂-emission (e.g. from biogas fermentation) and CO (e.g. synthesis gas from steel mill-emission or municipal solid waste).

References

¹ Definition by European Commission

² German Bioeconomy Council (2015): Brazil. <https://biooekonomie.de/sites/default/files/brazil.pdf>

³ CLIB2021: bioeconomy cluster based in Germany. German-Brazilian Innovation Guide (No.1).

CONVERGENT & CRITICAL ACTIONS TO DEVELOP THE BRAZILIAN BIOECONOMY

1	Modernization of the regulatory framework
2	Increased investment in R&D
3	Consolidation of scientific and technological base
4	Expansion and modernization of laboratory infrastructure
5	Stimulus to entrepreneurship
6	Dissemination of culture of innovation

HIGHLIGHTS OF THE UNIVERSE OF BIOECONOMY

INDUSTRIAL BIOTECHNOLOGY	PRIMARY PRODUCTION	HUMAN HEALTH
<p>Processing and production: chemicals, plastics, enzymes</p> <p>Environmental applications: bioremediation, biosensor, methods of reducing environmental impacts</p> <p>Production of biofuels</p>	<p>Crossing and improving plants and animals</p> <p>Veterinary applications</p>	<p>Diagnostic therapies</p> <p>Pharmacogenetics</p> <p>Functional foodstuffs</p> <p>Medical equipment</p>

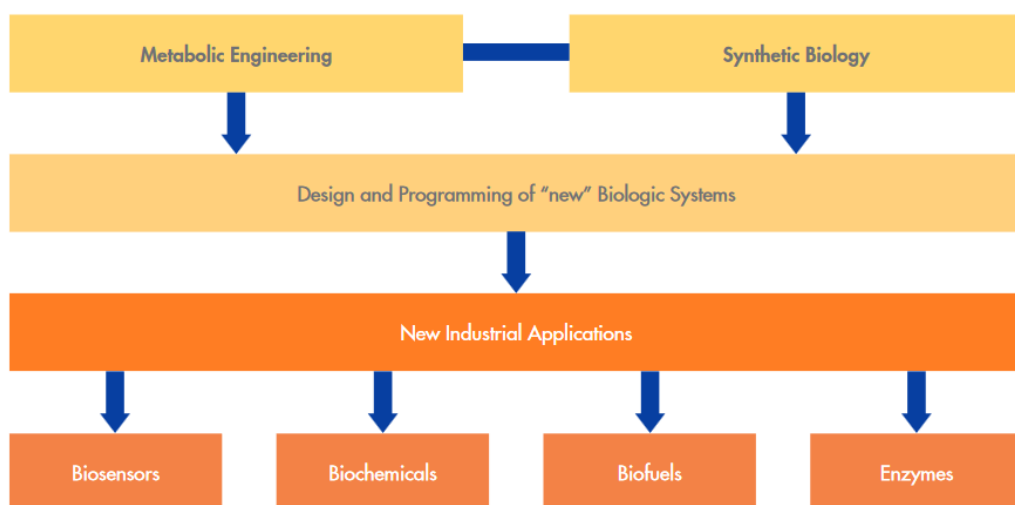
Source: OECD, 2009

Source

Brazil, H. B. R. (2011). BIOECONOMY. An Agenda for Brazil. A report by Harvard Business Review Analytic Services.

http://arquivos.portaldaindustria.com.br/app/conteudo_24/2013/10/18/411/20131018135824537392u.pdf

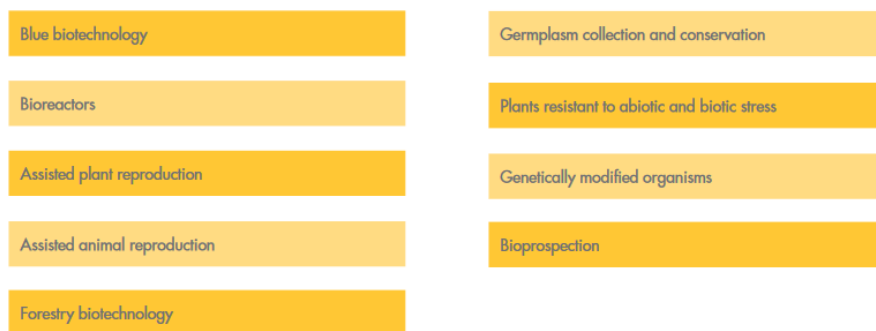
Possibilities for Industrial Biotechnology



Possibilities of Innovations in the Human Health Sector



Agribusiness frontier areas



Source

Brazil, H. B. R. (2011). BIOECONOMY. An Agenda for Brazil. A report by Harvard Business Review Analytic Services.
http://arquivos.portaldaindustria.com.br/app/conteudo_24/2013/10/18/411/20131018135824537392u.pdf

INFORMATION & COMMUNICATION TECHNOLOGY

In the past decade, Brazilian government focused on fostering information and communication technology (ICT) infrastructure. The priority was to make ICT goods and services available and affordable especially to the underserved population. One policy example is the establishment of the National Broadband Plan (PNBL) in 2010. The central goal was to provide broadband coverage to 40 million households with reduced tariffs. After two years, the government had launched a strategic programme to promote and foster Brazilian ICT environment (global R&D centres initiative, digital ecosystems initiative, start-up promotion, ICT skills development, etc.).² Mobile telecommunications technology 3G covers 69% (3827 out of 5570) of total municipalities in the country, whereas 4G serves 118 cities (2014).

The ICT market entices around 45% of the total sectoral investments in the region. This sector had a moderate but a steady growth of 5% between 2006 and 2014 subsequently reaching 2.7% GDP share. It employed 3.3% of the national labour force in 2014 and it is expected to reach 10.7% in 2022. Although currently Brazil has not a major role in the global ICT arena, its competence and potential has already caught worldwide attention. This can also be seen by the fact that foreign companies, which are specialized in telecom and IT services

(Telmex, America Movil, Telefonica, Portugal Telecom, Telecom India, etc.), dominate the domestic market.

In order to boost up innovation and productivity, Brazil is supporting and strengthening market competition. Business expenditure on R&D (BERD) in Brazilian ICT sector comprised 13.6% of the total national BERD (2014). This is almost double of Russian ICT BERD of the same year.² In terms of human resources, Brazil showed a promising development according to data from 2008-2011. The mean annual growth rate of personnel in the ICT sector reached 27% leaving behind China, EU and Japan among others.¹

ICT Service Exports³ (2016)

55%

ICT Goods Imports⁴ (2016)

13%

References

¹ PREDICT Key Facts Report (2017)

² OECD (2015): OECD Digital Economy Outlook 2015

³ World Bank. As percentage of service exports, balance of payments

⁴ World Bank. As percentage of total goods imports

MARINE RESEARCH

The biodiversity of Brazil is one of the richest in the world. It has been under investigation for many subsequent years now. Yet, the marine fauna is mostly unexplored. About 10.000 marine animals and 3.000 plants have been identified in present time. Around 10% of reef species are endemic to Brazilian marine region.²

Marine research comprises a variety of other natural sciences and stretches from studies of oceanic ecosystem including animals, plants, abiotic processes, underwater surfaces to technological solutions as well as marine bioproducts, energy and non-renewable commodities.

In recent years, due to the increasing threat of climate change, over-fishing and oceanic pollution researchers have converged their attention to conservation and sustainability of the marine ecosystem. Brazil has made many commitments towards marine environmental protection such as Promise of Sydney and UN's Sustainable Development Goal 14.

In 2014, per capita fish consumption ranged from 11 to 30 kilograms depending on the region.¹ The coastline of 8.400 kilometres not only

supplies the majority of the domestic consumption but it is also a gateway to novel pharmacological compounds.

In Brazil, marine research is carried out by academia in public universities and only a few work for the private sector and independent research centers. After the ratification of UNCLOS (United Nations Convention on the Law of the Sea), Brazilian government promoted maritime research on a much higher level and also put more effort in the coordination of separate entities of this sector. The UNCLOS had also facilitated the development of specific marine policies and establishment of certain institutes.

Porto Alegre

Centro de Estudos de Geologia Costeira e Oceânica

Rio de Janeiro

Universidade Federal Fluminense
Departamento de Biologia Marinha

Rio Grande

Fundação Universidade Federal do Rio Grande Departamento de Oceanografia Ciências Marinhas e Costeiras Laboratório de Oceanografia Física (LOF)

São Paulo

Universidade de São Paulo Instituto Oceanográfico

References

¹ MPA: Ministry of Fisheries and Agriculture

² Marine Hotspots. <http://www.marinehotspots.org/index.php/featured-projects/gulls/brazil>

NANOTECHNOLOGY

Global market for nanotechnology based products reached 2 billion USD in 2017 and is forecasted to grow annually at an average rate of 30%. Brazilian government actively supports further development of the national nanoscience since early 2000. Between 2000 and 2007, investments reached 160 million BRL (37.2 million EUR). Investments are mainly financed by the government through policies with a focus on basic research and creation of STI infrastructure. Application of nanotechnology in industries, however, had no strong supportive system from the government yet.

After the launch of the Nanotechnology National Programme (funding budget of 31 million USD), national scientific publications in the nanotechnology field had seen a significant growth. In 2016, the number of publications was more than 20.000. This accounts for roughly 1.6% of the global nanotechnology publications. Although the share is relatively moderate, the compound annual growth rate of 12% is right behind India (22%) and China (20%).

Nanoscience and nanotechnology is highly interdisciplinary since they draw

on number of areas of science and technology.

Brazilian nanotechnology publications are mainly related to physics, chemistry and materials science. International research cooperation contributed much in the Brazilian nanotechnology. Almost 40% of total nanotechnology publications had an foreign co-author. Authors from the EU accounted for the highest total share (e.g. France 15%, Germany 11%, Spain 9%).

2001....

Multidisciplinary Cooperative
Research Networks and Institutos do
Milênio

2004....

Development of
Nanoscience and Nanotechnology
(28 million USD)

2005....

Nanotechnology National Program

2007-2010....

PACTI & PDP

2009....

Nanotechnology Competitiveness
Forum & INCT

2012-2015....

ENCTI

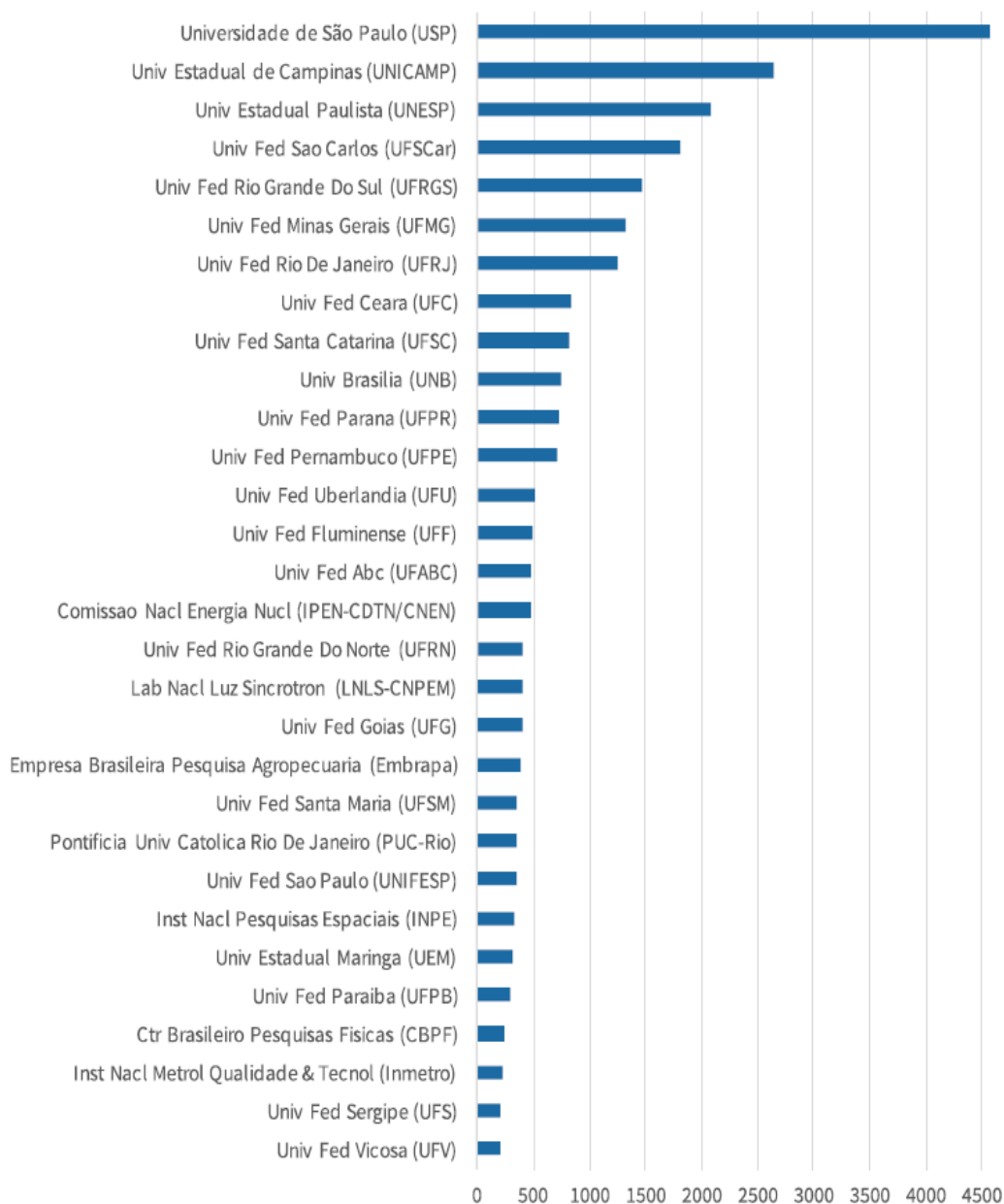
2013....

IBN (102.3 million EUR) & CNI

References

NanoBusiness - Informação e Inovação Ltda. (2016): Analysis Of Science, Technology And Innovation Opportunities In Nanotechnology In Brazil For Dutch Institutes And Companies. https://www.rvo.nl/sites/default/files/2017/03/Nanotech_Brazilie.pdf.

TOP 30 ACTORS IN THE NANOTECHNOLOGY PUBLICATIONS OF BRAZIL



Source

NanoBusiness - Informação e Inovação Ltda. (2016): Analysis Of Science, Technology And Innovation Opportunities In Nanotechnology In Brazil For Dutch Institutes And Companies.
https://www.rvo.nl/sites/default/files/2017/03/Nanotech_Brazilie.pdf.

RENEWABLE ENERGY

Energy derived from renewable resources is not a new thing. Brazil's continuous commitment to renewable energy, rich natural resources and the highly-efficient agricultural industry made it one of the world's ten largest electricity producers.

Nearly 85% of the domestic electricity is derived from renewable resources where hydropower accounts for 75%. For decades, hydroelectric power generators were utilized to produce a relatively high share of domestic energy supply. Yet, biofuels is another strength of Brazilian renewables. In fact, Brazil is the world leader in production of biofuels. Nevertheless, Brazil is in the process of rapidly diversifying its energy portfolio by wind, photovoltaics and biomass.

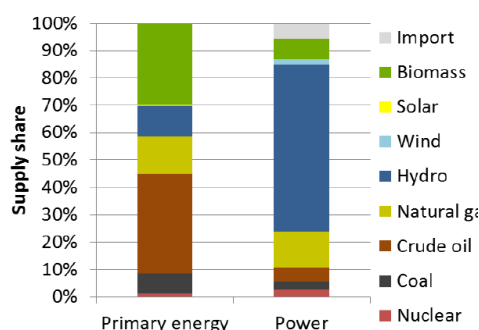
Brazil's wind power capacity grew from 29 mega-watts to 8.000 mega-watts within 10 years (2005-2015). Regardless of this positive development, it has a one major downside, which is the seasonality. Wind power has seasonal characteristics reaching its pick strength between June and December.

Therefore, photovoltaics have a great role in complimenting wind power generators. Today, not long-after the large-scale deployment of solar energy supported by the government, brazil hit 1 giga- watt solar power capacity. The

growth of this sub-sector was exponential. Bahia, Piauí, Minas Gerais, Rio Grande do Norte and Pernambuco are the states where the main operational plants are located.

Another rapidly growing sub-sector is the biomass. Around 27% of the domestic energy production is thanks to this novel method of using organic garbage, agricultural remains, wood rests and food waste. It is highly praised by the global environmental activists as well as by the industry itself, as it has a promising future in mitigating carbon emissions and enables the production of other biomass-based by-products. The biomass energy sector employs over a million of people.

In terms of investments, although oil and gas still receive the majority of total energy investments, renewables are steadily catching up. In 2016, according to UN Environment and Bloomberg, it reached 78.3 billion USD. To spur the development of wind, solar and biomass, several funding programmes have been initiated.



References

- ¹ Gils, H., Simon, S. and Soria, R. (2017): 100% Renewable Energy Supply for Brazil - The Role of Sector Coupling and Regional Development, MDPI Journal Energies.

HEALTH & MEDICAL RESEARCH

Healthcare sector in Brazil has a massive potential being the 9th largest healthcare market on the world. In 2015, healthcare expenditure was at 9.5% of the national GDP (1.804 billion USD). The population of the country has reached over 200 million with an annual average growth rate of 0.9%. The country is expecting demographic challenges in the coming decades. Life expectancy in Latin American countries grew from on average of 45 years to 75 during 1940-2015.

Brazilian government strongly supports the healthcare system. The country is a great example of a cooperation and partnership between public and private interest groups. This model leads to a higher efficiency and investments in the sector. It is built on a prevention basis instead of curing – which contributes to overall cost reduction.

The system is called Sistema Único de Saúde (SUS) and it covers approximately 70% of the population free of charge. On the other hand, the private health sector closes gaps in the demand that the SUS alone was unable to. Over 50 million people have a private healthcare insurance. The share of individual healthcare spending

accounts for about 30%.

Besides the growth of middle class, recent increase in the health plan is also related to collective contracts, since provision of private healthcare insurances is highly valued by the workers. Private healthcare market in Brazil is highly competitive. It has dozens of companies, the largest of which serves only 8% of the 30% market share.

Although it may seem that the market is highly saturated, there is growing gap and differences in this sector. Business opportunities can be seen in the healthcare technology, efficient management, facilities, etc. Recently, the Brazilian government has opened its hospital doors to international investments. Prior to this major legislative change, only 1% of the total beds of the hospitals were operated by the private sector and moreover international actors were restricted from this market segment. Furthermore, private laboratories also present a very attractive segment mostly due to its high profitability.

References

PWC: The Pharmaceutical Industry in Brazil.
<https://www.pwc.com.br/pt/publicacoes/setores-atividade/assets/saude/pharma-13-ingles.pdf>.

HEALTHCARE MARKET OPPORTUNITIES

HOSPITALS

- Recent market liberalization
- High potential

PRIVATE LABORATORY

- High profit margins
- 5 billion EUR market
- High number of mergers and acquisitions
- Investments through greenfields to regional markets in the Northeast and Central-West

PUBLIC HEALTHCARE

- PPP (Public Private Partnership)
- Government transfers to private sector in form of infrastructure, human capital, technology, etc.

PHARMA-INDUSTRY

- Patient freedom to choose between brand-name, generic and biosimilar drugs since 2014
- 14 trillion EUR market

DOMESTIC & INTERNATIONAL INDUSTRY LEADERS

3M, Baxter, Beckton Dickinson, Dentsply, Fresenius, GE, Healthcare, Geratherm, Johnson & Johnson, Philips, Roche, Medtronic, Siemens Healthcare, GSK, Bayer, MSD, Sanofi, Pfizer, Novartis, Novo, Nordisk

Source

PWC: The Pharmaceutical Industry in Brazil. <https://www.pwc.com.br/pt/publicacoes/setores-atividade/assets/saude/pharma-13-ingles.pdf>.

INFRASTRUCTURE

Brazil produces wide range of consumer products and it is also one of the largest commodity and agricultural exporters. This implies that logistics plays an important role in the country's economy. The federal policies have been focusing on the development of transportation infrastructure over the past decade by increasing government expenditure from roughly 1.05 billion (2005) to about 4.24 billion EUR (2014).¹ Although these numbers are growing each year, the current and future demand is enormous.

Thus, in 2016, the Project Growth ² (*Projeto Crescer*) has been announced with intends to privatize airports, highways, ports, railways, and many other infrastructure elements. Projeto Crescer comprises various projects. It will be carried out in several stages, e.g. for the first stage 34 assets were listed for the auction and in the second stage there will be 55 single projects. Each single project will be under the rule of Investment Partnership Programme, which facilitates foreign investments to Brazil. Accordingly, public notices and auctions are extra carried out on English. Another main feature of the Project Growth is the emphasis of accepting only those

proposals that have a proven environmental feasibility studies.

According to the government of Brazil, the entire Project Growth is foreseen to raise around 12.1 billion EUR ³. To further promote and aid the effectiveness of the programme, the BNDS had introduced new credit models. In addition, as a supportive system of these types of public programmes, the Brazilian Government introduced a special tax incentive – REIDI. This tax regime allows those firms, whose infrastructure projects were approved by the relevant Brazilian authorities, to apply for social tax exemptions when procuring intermediate goods and services for the accomplishment of their projects.

⁴
**FRIGHT TRANSPORTATION
INFRASTRUCTURE**
(current & projected)

Type	2017	2031
Rail	20.7%	43%
Water	13.5%	15%
Road	61.1%	38%
Air	0.4%	1%

References

¹ CNT: National Confederation of Transport Report (March, 2017)
² Projeto Crescer: <http://www.avancarparcerias.gov.br/>
³ Federal Revenue: REIDI
⁴ CNT: National Confederation of Transport Report (March, 2017); National Plan for Logistics and Transportations (PNLT); Ministry of Transportation (2012)



5

OPENING BUSINESS ENTITY

OPENING BUSINESS ENTITY

To sell goods and provide services in Brazil it is not compulsory to set up a business entity, because import of goods and services is permitted as a general rule. However, there are exceptions for rendering specific services and marketing certain goods. Hence, it is advisable to consult a Brazilian lawyer to avoid getting into an imbroglio with Brazilian justice system, especially tax authorities.

The legal structure of a business entity first and foremost depends on its type: for-profit or non-profit organization. Foreign companies should additionally decide whether as a parent company to establish a branch in Brazil or incorporate an independent subsidiary.

COMMON LEGAL STRUCTURES OF FOR-PROFIT ORGANIZATIONS

CORPORATION

SOCIEDADE ANÔNIMA

- Formed by public / private capital
- Profit orientated
- Legislation: Law 6.404/1976
- Legal Name: "NAME" S.A. or Cia.
- Two or more shareholders (closely held companies); three or more shareholders (publicly traded companies)
- Registration and Filing: at Junta Comercial of applicable jurisdiction
- Capital Share: divided into shares
- Capital: no min. capital requirement but 10% of the share issuance price per shareholder in cash
- Management: set by shareholders; one or more partners / contactually defined non-owner (foreigners must have permanent visa)
- Termination: dissolution comes into effect either by court order or by the ruling of administrative authorities with jurisdiction. Incorporation, merger and spinoff are forms of dissolution.

LLC

SOCIEDADE LIMITADA

- Formed by individuals or capital
- Profit orientated
- Legislation: Law 10.406/2002 (Article 1.052 – 1.087)
- Legal Name: "NAME" e companhia limitada
- Two or more owners (individual or legal entities)
- Registration and Filing: at Junta Comercial of applicable jurisdiction
- Capital Share: between owners
- Capital: no min. capital requirement
- Management: one or more partners / contactually defined non-owner (foreigners must have permanent visa)
- Termination: at the end of its term, unanimous resolution of all members, resolution of members representing an absolute majority, in companies with an open-ended duration, insufficient plurality of members, expiration of company's license to operate, court decision, bankruptcy.

COMMON LEGAL STRUCTURES OF FOR-PROFIT ORGANIZATIONS

INDIVIDUAL LLC

EIRELI

- Formed by an individual
- Profit orientated
- Legislation: Law 12,441/2011
- Legal Name: "NAME" EIRELI
- One proprietor, one EIRELI
- Registration and Filing: at Junta Comercial of applicable jurisdiction
- Capital: min. 150.000 BRL (also in assets)
- Management: by owner / non-owner stated in a contract (foreigners must have permanent visa)
- Termination: compliance with LLC rules

BRANCH OF A FOREIGN FIRM

- Possible to establish a branch but it is not advisable
- Tedious and time-consuming to receive a government authorization
- Authorization: min. 6 months
- Authorizing Organ: MDIC
- Establishment Cost: same as opening a new business entity
- Tax: same taxation rate as Brazilian companies & no advantages that can be applied to fully independent firms

DETAILED INFORMATION IS AVAILABLE (IN PORTUGUESE) AT:

www.drei.smpe.gov.br

www.smpe.gov.br

There are several types of legal forms applicable to non-profit organization in Brazil (e.g. Association, Civil Society Organization, Cooperative, Foundation and Social Organization). The most suitable one for a business entity that is neither fully philanthropic nor profit-oriented is the organizational type “Association”. This form can change its status to “Civil Society Organization of Public Interest” (OSCIP) after 3 years of operation.

ASSOCIATION AS A NON-PROFIT ORGANIZATION

CSOPI

ORGANIZAÇÃO DA SOCIEDADE CIVIL DE INTERESSE PÚBLICO

- Union of two or more individual or legal entities with a non-economic main goal
- Non-Profit Private Law Entity with a focus on: Studies, R&D, Science, Philanthropy, Promotion of social and cultural assiatnce, Human rights, Environmental purposes, Clubs or services.
- Legislation: Law No. 9790/99
- Legal Name: “NAME” OCSIP
- Capital: associates donations, surplus revenue
- Management: General Assembly
- Termination: must be specified by the General Assembly in the core legal document of the Association

ASSOCIATION

ASSOCIAÇÃO

- Union of two or more people with common non-economic objective
- Non-Profit Private Law Entity
- Legislation: Law 10.406/2002 – arts. 52 to 61
- Legal Name: “NAME” Associação
- Capital: internal / exteranal donations
- Management: members
- Termination: must be specified by the General Assembly in the core legal document of the Association





6

FUNDING

BUSINESS & RESEARCH OPPORTUNITIES

Brazilian supportive system in regards to financing and funding of STI and business has a wide spectrum. It can range from loans, grants, equity investments, tax incentives to intangible support.

Different funding schemes are being set up in different Brazilian states through the existing Research Foundations in each state to fund Brazilian participation in Horizon 2020 collaborative projects. The first scheme was established by the Research Foundation of the State of São Paulo (FAPESP) in 2015. Following this, the National Council of Research Foundations has led a coordinated effort among the other research foundations in Brazilian States to follow the example of FAPESP.

The STI funding is mainly financed by the government and affiliated entities such as state-owned enterprises. The National Fund for Science and Technology (FNDCT) managed by FINEP (Funding Authority for Studies and Projects) together with CNPq (National Research Council) is the main source of the Brazilian research and innovation scene. The FNDCT budget is covered by taxes levied upon certain products but also by a fraction of a revenue stemming from natural resources.

The distribution of the FNDCT is sector based and the allocation occurs through various channels into public and private R&I funding:

- scholarship grants
- research subsidies
- economic grant
- loans
- corporate investment
- investment and participation funds
- state purchase with local preference margin
- technological order and
- tax incentives

The support of private R&I is carried out both through direct and indirect channels and it has been steadily growing over the past years. The direct funding is mainly comprised from tender subsidies, low-interest loans and funding of R&I partnerships between innovative companies and universities. In contrast, the indirect support system uses tax incentives to accelerate business R&I. Since 2005 when the Lei do Bem (Goodwill Law) was introduced, the number and the scope of the benefits originating from this type of incentivizes grew constantly.

Source

JRC Science for Policy Report: RIO Country Report 2015: Brazil (2016)

IMPORTANT STI AGREEMENTS BETWEEN EU-BR

The most recent bilateral agreement “Administrative Agreements” brings new heights to the long-standing relation of the EU and Brazil. Signed on May 2018, by the European Commission and the three Brazilian funding agencies - the Brazilian National Council for Scientific and Technological Development (CNPq), the Brazilian Funding Agency for Studies and Projects (FINEP) and the Brazilian National Council of State Funding Agencies (CONFAP) – it strengthens the cooperation of both parties on the STI landscape.

The agreement fosters the cooperation by tripartite supportive mechanism: (1) extension of the national co-funding of Brazilian participation in projects under Horizon 2020 from eight Brazilian States to the entire country, (2) promotion of cooperation between parallel projects under coordinated calls for proposals in Brazil and the EU and (3) twinning of existing projects in areas of common interest. With this agreement in force, European and Brazilian researchers will be able to cooperate more easily on global issues such as Zika virus, safety of airplanes or 5G technology.

The European and Brazilian STI agreement, in force since 2007, lead to more than 350 common projects. The objective of the agreement is to encourage, develop and facilitate

cooperative activities in areas of common interest by carrying out and supporting scientific and technological research and development activities. The Joint Steering Committee is responsible for the management of the agreement and meets, normally, once a year. The common areas of research and innovation comprise, inter alia, marine research, information and communication technologies, health, transport and environmental research.

Other agreements and arrangements include:

- The "Belém Statement on Atlantic Research & Innovation Cooperation" which aims to improve the scientific knowledge of marine ecosystems and the links between oceans and climate change, food and energy systems, as well as the dynamics of the Atlantic Ocean and its interconnected circulation systems from Antarctica to the Arctic.
- The Agreement for cooperation (CA) between the European Atomic Energy Community and the Government of the Federative Republic of Brazil in the field of fusion energy research entered into force in January 2013. The CA constitutes the appropriate framework to encompass and promote further collaborative

IMPORTANT STI AGREEMENTS BETWEEN EU-BR

activities and projects and its main objective is to intensify cooperation between the Parties in the areas covered by their respective fusion programs

- The Cooperation Arrangement between the European Commission's Joint Research Centre (JRC) and the Brazilian Ministry of Science, Technology and Innovation (MCTI), signed on 24/1/2013 in Brasília, intends to strengthen and further structure scientific and other cooperative activities in the areas of disaster prevention and crisis management; climate change and sustainable management of natural resources and ecosystem services; energy, including bioenergy and smart grids; food security; bio-economy; information and communication technologies (ICT), as well as nanotechnologies.
- DG Education and Culture and CAPES (Coordination for Improvement of High Level Education - linked to the Ministry of Education of Brazil) are responsible

for the policy dialogue on education. A Memorandum of Understanding between the Brazilian Ministry of Foreign Affairs and the European Commission was signed in July 2007, focusing on academic exchanges, the creation of an Institute of European Studies, and policy dialogue. A Joint Declaration on Education and Training was signed in May 2009.



Reference

https://ec.europa.eu/info/news/eu-and-brazil-step-cooperation-research-and-innovation-2018-may-22_en
<http://ec.europa.eu/research/iscp/index.cfm?pg=brazil>

SCHOLARSHIPS

To promote the consolidation and expansion of STI, the government has introduced several programmes to attract overseas talent. For instance, "Science without Borders" provides annually two scholarships for young talents and highly qualified researchers from abroad to work with local investigators in joint projects, contributing to the capacitation of human resources and promoting the return of Brazilian scientists working overseas.¹

The scholarship program for "Special Visiting Researcher" aims to attract a senior foreign researcher recognized internationally as leadership in priority areas of Science Without Borders program, to conduct projects with Brazilian research groups and visit Brazil for up to three months each year over two to three years. The program also provides scholarships for Brazilian students to doctoral and postdoctoral

key projects in Brazil and abroad. The benefits of this fellowship include support for living expenses when the researcher is in Brazil as well as funding for the local laboratory.²

Young researchers working abroad with very good scientific accomplishments and who have excelled both qualitatively and quantitatively in their scientific or technological career are eligible to receive funding and resources to perform a two to three year-long research project in Brazil. The host research group would also receive funds, as a bench fee. An international call for proposals will be periodically and internationally disclosed. The program anticipates the availability of funds for at least 100 young researchers per year.³

Reference

¹MCMANUS, CONCEPTA, & NOBRE, CARLOS A.. (2017). Brazilian Scientific Mobility Program - Science without Borders - Preliminary Results and Perspectives. Anais da Academia Brasileira de Ciências, 89(1, Suppl.), 773-786. Epub May 04, 2017. <https://dx.doi.org/10.1590/0001-3765201720160829>

^{2,3} ciencias sem fronteiras, Estudante, Bolsas, Empresas, Exterior, CNPq, Ministério da Ciência e Tecnologia, o programa, Pesquisador, IES/ICT, governo, Graduação, pós, Exterior, doutorado, doutorado pleno - <http://www.cienciasemfronteiras.gov.br/web/csf-eng/opportunities-for-individuals-from-abroad>

Brazilian Development Bank

One of the national key players in supportive system of R&I funding is the Brazilian Development Bank (BNDES). It is a state-owned bank with a main objective to provide financial support for business entities in order to maximize national social benefits. The target sectors, according to its new lending policy from 2017, are: innovation, infrastructure, health, environmental projects, national education. Besides BNDES, private credit institutions (domestic and international) serve also a certain market share.

Any private company with a registered headquarters in Brazil operating in the aforementioned market sectors is eligible to take a loan from BNDES. The success rate, interest rate along redemption conditions depend on the credit amount requested and the operating sector / project sector.

The long-term interest rate (TJLP) is at 6.71% whereas the overnight rate Selic is 6.5% as of May, 2018.

The policy renewal in 2017 presented a major reform and change of strategic direction of the BNDES. In the past, the main criterion of giving away credit lines was based on the industry types.

Today, the credit-applicants features, potential benefits and the impact that it can have on the social welfare determines the credit issuance.

Moreover, as a result of no optimal expenditure of public budget, BNDES set a limit to the amount of its long-term credits. From the total available amount of credit, 80% will be disbursed.

Business entities who signed their credit line contracts with BNDES in 2018, will be affected by a different form of TJLP – namely, TLP which stands for a long-term rate. TLP is a modified version of TJLP because it is anchored to the national inflation rate and the real interest rate of government bonds. This modification is a part of the national monetary policy that would facilitate the alignment of national Treasury and BNDES interest rates.

Reference

BNDES Finem program
BCB: The Central Bank of Brazil

BNDES CREDIT LINES BASED ON THE MARKET SECTORS

ELIGIBLE FOR CREDITS ABOVE 20 MILLION BRL
(4.6 MILLION EUR)

LINHA INCENTIVADA (A)

- Projects in innovation, environment, education, health and public welfare
- Projects of government modernization
- For micro and medium-sized companies with an annual revenue up to 300 million BRL
- Basic loan interest rate (TJLP): up to 80% of total investments

LINHA INCENTIVADA (B)

- Projects in territorial and regional development, education, health and private welfare
- Projects in technology industry and services, knowledge intensive businesses, food and biofuel production
- Basic loan interest rate (TJLP): up to 60% of total investments

LINHAS PADRAO (A)

- Expansion of production capacity
- Basic loan interest rate (TJLP): up to 30% of total investments

LINHAS PADRAO (B)

- Other investments
- Basic loan interest rate (TJLP): up to 0% of total investments

INFRASTRUCTURE

- Independent conditions
- Basic loan interest rate (TJLP): 0 % (energy power transmission) - 80 % of total investments (solar power, sanitation, waterways, biofuel transportation)
- Conditions vary depending on the criteria of relevance and sustainability

Moreover, BNDES has a budget for funding environmental, social, cultural, scientific and technological projects.

It is also possible to exchange a share of the company equity for BNDES credit line. BNDESPar, as a division for private equity, is in charge of such activities.

Source

BNDES Finem Program. BNDES Finem progra.
http://www.bndes.gov.br/wps/portal/site/home/financiamento/bndes-finem!/ut/p/z1/04_iUIDg4tKPAFJABpSA0fpReYllmemJJZn5eYk5-hH6kVFm8T6W3q4eJv4GPgYmFkYgji4hlW6mfoFGBmHm-l76UfgVFGQHKglAgX76bw!!/

Finep

Finep – the Funding Authority for Studies and Projects also known as the Innovation Agency is a Brazilian organization under the Ministry of Science and Technology with a mission of promoting Brazil's economic and social development by providing public funding for STI at private and public institutions. It grants reimbursable and non-reimbursable funding to institutes and companies registered in Brazil. Finep aids wide range of STI development cycle from basic research to service and processes.

Finep's reimbursable funding is financed through its own resources or transfers. The non-reimbursable funding, in contrast, is provided by the National Development and Technical Funding (FNDCT). To be eligible for the latter, an interested organization have to be non-profit. For both funding options, it is required to submit a proposal or strategic plan.

Another economic actor who is attracting much attention from Finep are technology companies. The project Projecto Inovar besides providing broad spectrum support also offers capital injections through venture capital. Together with BNDES and SEBRAE (Brazilian Service of Support for Micro and Small Enterprises), the Finep represents one of the major supporting systems for the sustainable growth of STI based organizations including SMEs (small and medium enetrprises).

SEBRAE

The Serviço Brasileiro de Apoio às Micro e Pequenas Empresas (SEBRAE) is a non-profit private entity ecouraging formation and growth of SMEs. Founded in 1972, its mission is to promote sustainable and competitive development of small and medium scaled ventures via education, mentorships as well as through private sector. Its branches are located in all Brazilian states allowing them to be the regional experts.

The main activity of SEBRAE is to provide reliable information accumulated through years of experience working with SMEs and offer well-tested courses and trainings. It offers many of its services on the internet free of charge (in Portuguese language).

Reference

Finep: <http://www.finep.gov.br/>

SEBRAE: <http://www.sebrae.com.br/sites/PortalSebrae>

EMPRAPII

The Brazilian Agency for Industrial Research and Innovation (EMPRAPII) is a social organization connected to the Ministry of Science, Technology, Innovation and Communications (MCTIC) as well as to the Ministry of Education (MEC). It has been contracted by the government as the government acknowledged the opportunity of utilizing synergies between industry and research. In cooperation with industrial companies EMPRAPII aids technological institutes which are active in specific research fields with an ultimate objective to support, promote and encourage development of technological research for the country's innovation.

The EMPRAPII provides funding exclusively for innovation projects.

It is granted to tech-companies and research institutes excellent in their fields that are competitive enough to win customers and qualified enough to meet market demand for RDI (research, development and innovation). Moreover, thanks to its cost-sharing model that enables quickness, flexibility and risk reduction, EMPRAPII offers their know-how and capacity to generate technological solutions to entities in the private sector.

ZPE

Zona de Processamento de Exportação (Export Processing Zones) are free trade industrial districts in Brazil offering various tax incentives to producers of goods that are focused on export. Companies registered in the ZPEs enjoy several benefits such as government granted tax reliefs that are applicable to procurements of production materials. They are also not obliged to currency exchange since the majority (80%) of their final goods must be traded on foreign markets. Products sold on the domestic market, however, are subject to all applicable taxes.

In general, ZPE tax incentives can be classified into two groups: suspensions for the purchases of goods and services on the domestic and external market. For instance, in some Export Processing Zones, firms can receive rights to income tax exemptions for up to 75%. Once authorized ZPE companies can apply for the contract renewal for another 20 years.

Reference

EMPRAPII: <http://embrapii.org.br/en/>

ZPE: Ministry of Industry, Commerce and Services; National Council of Export Processing Zones

CONFAP

The Brazilian National Council of State Funding Agencies (CONFAP) created in 2006 represents the interests of the research funding agencies of all Brazilian states including the Federal District. In regards to international cooperation, it was the managing organization of the Newton Fund. It partners with various organization in Europe such as INRIA or CNRS.

In the recent years, CONFAP has increased its cooperation with the EU in the framework of the Horizon 2020 programme. As a result, Brazilian researchers and organization wishing to take part in the Horizon 2020 are now able to receive financial support from the Brazilian government. This step forward enables successful bilateral cooperation between European and Brazilian organizations and academia.

Besides the successful coordinated calls with the EU, CONFAP signed an agreement "Implementing Arrangement with the EC and the European Research Council (ERC)", facilitating Brazilian researchers to join ERC research Teams.

Furthermore, at a national level it had played a main role in the proposition of the new Brazilian legislation for Science, Technology and Innovation. CONFAP has a unique territorial coverage and acts directly with governmental actors which support R&I policies and programmes.

CNPq

The National Council for Scientific and Technological Developemt (Conselho Nacional de Desenvolvimento Científico e Tecnológico) is the oldest funding agency in Brazil. It operates under the Ministry of Science, Technology and innovation with a core objective to promote scientific and technological research and graduation of Brazilian researchers. Its activities are categorized into fellowships, research, grants, scholarships, information and dissemination activities.

The CNPq together with other agencies such as CAPES (Higher Education Personnel) has contributed and is still contributing to the student mobility in Brazil, particularly at the graduate level. In the 1970s and 1980s, there was a significant number of Brazilians training abroad. After returning home, these scientists contributed to the vigorous development of the science and graduate education in Brazil.

Reference

<https://www.incobra.eu/en/object/organisation/194>

https://ec.europa.eu/info/news/eu-and-brazil-step-cooperation-research-and-innovation-2018-may-22_en

COUNTRY TAX INCENTIVES

Brazil has a broad and diversified system of tax incentives. This is due to the country's sectorial development strategy plan. In current, Brazil is seeking to improve its infrastructure, information and communication sector, establish a strong innovation fauna, expand and refine renewable energy sector as well as reinforce its traditional industries such as automotive.

Tax incentive programmes exist both at federal and regional levels. Below some of the main ones are presented.

- REPES:** for export of services
- REIDI:** infrastructure development
- REPORTO:** for modernization of port infrastructure
- PADTV:** for development of national digital-tv industry
- RECAP:** for acquisition of capital goods by export companies and shipyards
- REPETRO:** export and import tax mechanism to support exploration of gas and oil production
- REINTEGRA:** for production of exported goods
- REPENEC:** for development of oil and gas industry infrastructure in the Central-West , North and Northeast
- IPTU:** for urban real estates

- GMC RESULTION:** for MERCUSOR member states in case of lack of regional raw materials
- SUDAM:** for companies that set their operation in Acre, Amazonas ,Amapá, Maranhão, Mato Grosso, Pará, Rondônia, Roraima and Tocantins states
- SUDENE:** : for companies that set their operation in the states of the Northeast Brazil and Minas Gerais and Espírito Santo
- EX-TARIFÁRIO:** temporary reduction of import tariffs aimed at sectors such as IT, ICT, capital goods, etc.
- ICMS:** similar to VAT-based tax reductions
- ISS:** for municipal services

References

Federal Revenue Service. <http://idg.receita.fazenda.gov.br/acesso-rapido/legislacao/legislacao-por-assunto>
Deloitte: Tax and Financial Incentives. <https://www2.deloitte.com/br/en/pages/doing-business-brazil/articles/tax-and-financial-incentives.html>



7

VISA REQUIREMENTS

VISA REQUIREMENTS

Brazil has with more than 90 jurisdictions a visa exemption agreement. Passport holders of these countries, especially citizens of the European Union (EU) do not need either a tourist nor business visa. They are allowed to enter and stay for up to 90 days. However, citizens of other countries and those who are intending to stay in Brazil for a longer period than 90 days need to apply for a visa. There are different visa categories, depending on the purpose and length of the travel. Due to recent adjustments in the immigration Law, it is strongly advised to check regularly the official websites of Brazilian Embassies to your country of residence.

VISA EXEMPTION

- List of eligible countries for visa waiver¹
- 90 days
- Multiple entry & exit
- No immediate visa extension for citizens of EU (except Portugal, Poland, Great Britain and Ireland)
- Visa extension grant only by Brazilian Federal Police
- Only after 90 days stay outside Brazil re-entry is permitted
- Total duration of stay max. 90 days within 6 months
- Requirements, length of stay and extensions vary between countries in the visa waiver programme. It is advisable to refer to the local Brazilian Embassy/Consular.

INVESTOR VISA

- Permanent residence visa
- Foreigners who plan to invest in Brazilian economy (economy, science, society, technology, culture) that generates job vacancies and contributes to the national GDP
- Minimum investment budget of 0.5 million BRL (116.000 EUR) in foreign currency
- R&D and STI investments must be at least 150.000 BLR (35.000 EUR)
- For more detail and up to date information contact the local Brazilian Embassy/Council

RESIDENCE VISA

- Family reunion
- Marriage (heterosexual and same-sex)
- Individuals with Brazilian siblings
- Stateless individuals whose life is at risk
- Foreigners from countries affected by war, conflicts and natural disasters
- Individuals who are forced to slavery
- Victims of human trafficking

Link

¹ Countries for visa waiver:
[https://sistemas.mre.gov.br/kitweb/datafiles/Chicago/en-us/file/Visa%20requirements%20per%20country_22_11_2017\(1\).pdf](https://sistemas.mre.gov.br/kitweb/datafiles/Chicago/en-us/file/Visa%20requirements%20per%20country_22_11_2017(1).pdf)

SCIENCE & RESEARCH

VITEM I

- For scientists, researchers, postdoctoral, university teachers and language assistants. For detailed description and required documents contact your local embassy / consulate
- More than 90 days
- Multiple entry & exit
- Processing time varies from country to country (min. 7 working days)
- Visa Fee

EDUCATION

VITEM IV

- For students, PhD, pupils, language and vocational training courses. For detailed description and required documents contact your local embassy / consulate
- More than 90 days
- Multiple entry & exit
- Processing time varies from country to country (min. 7 working days)
- Visa Fee (except for German and Argentine citizens)

WORK

VITEM V

- Work visa. For detailed description and required documents contact your local embassy / consulate
- More than 90 days
- Multiple entry & exit
- Processing time varies from country to country (min. 3 working days)
- Visa Fee

SPORTS & ARTS

VITEM XII

- For artists, musicians and athletes. For detailed description and required documents contact your local embassy / consulate
- More than 90 days
- Multiple entry & exit
- Processing time varies from country to country (min. 3 working days)
- Visa Fee

JOURNALISM & MEDIA

VIVIS

- For journalists and camera crew. For detailed description and required documents contact your local embassy / consulate
- More than 90 days
- Multiple entry & exit
- Processing time varies from country to country (min. 10 working days)
- Visa Fee

STUDENT INTERNSHIP

VITEM IV

- For students who want to realize internship as part of their studies at their home university. For detailed description and required documents contact your local embassy / consulate
- More than 90 days
- Multiple entry & exit
- Processing time varies from country to country (min. 10 working days)
- Visa Fee (except for German and Argentine citizens)



8

ADDITIONAL INFORMATION

DOs & DON'Ts

Language

Brazilians are proud of their language, Portuguese. Even though it is closely related to Spanish, and pretty mutually understandable in the written form, the spoken languages are very different. That way, if you cannot speak Portuguese it's better to use English than Spanish, given that your interlocutor does not speak Spanish, to avoid misunderstandings. It is also appreciated when foreigners make efforts to use some Portuguese words such as good morning or thank you.

Hospitality / Giving gifts

If you want send thank you notes or bring flowers to business dinner or to any other occasion, avoid chrysanthemum flowers, which are usually used in funerals.

Drinks

Brazilians like coffee, and will likely offer you some and expect you to accept it. Normally called *cafezinho*, it is really strong!

Business Deals

Doing business in Brazil requires patience. Besides the bureaucracy, which can be really slow, vacations in Brazil are taken in periods of 10 to 30 weekdays, usually in July, December, or January. In these periods, companies may be understaffed and processes may take longer.

Organizational Structure

It is always good to know how the organizations are structured. Most firms and enterprises in Brazil are very hierarchical. Showing respect towards senior employees or people in a higher position is standard.

Dress

Business dress-code varies between regions and companies. Clothing considered semi-casual in São Paulo can be seen as casual in Rio, for instance. In doubt, wear casual at first, and ask your business partners about usual code.

Communication style

Do not make ethnic jokes. Racism is unfortunately still a big issue in Brazil, and should not be used as a joke, anywhere. Controversial subjects such as politics or religion should also be avoided. Topics like football, local cuisine, music, and the Portuguese language are welcome. Most importantly, if you want to criticize something about the country, be careful on how you do it. All Brazilians are aware of the its problems, and don't feel comfortable with strangers pointing them out.

Body language

Brazilians communicate in a very close manner, using a lot of gestures to reinforce their argument. Arm touching or shoulder taps are common. Having an eye contact is important.

Use of Titles and Names

At the first meeting, address people in a formal way, with titles and surnames. Once acquainted, it is very common to use first names.

Business identity

Brazilians are passionate about football. This means an endless topic to speak about, but using colours and symbols that resemble local football clubs is not a good idea. As an example, if you use blue in Porto Alegre, your business will be seen as related to Grêmio and probably be boycotted by the supporters of Internacional, Grêmio's biggest rival.

FAQs...

YOU

I am a business actor and I would like to know in detail about current Brazilian market mechanisms.

ENRICH in Brazil offers its customers Market & Research Studies. Currently, ENRICH in Brazil in cooperation with other ENRICH Centres (China and USA) is offering an analysis of the industry demand in Brazil with the main focus on Industry 4.0. Since this global survey on digital transformation comprises trends from Brazil, Europe, USA and China, it gives a broader picture and comparison possibilities.

For customers, who are interested in getting a detailed market analysis of a certain business sector, ENRICH in Brazil offers a Customized Market Analysis service.

ENRICH

YOU

I find Brazilian market very enticing and would like to get connected with Brazilian business actors.

ENRICH in Brazil organizes Matchmaking & Innovation Tours regularly. During this tour, European and/or Brazilian companies (including start-ups) and R2M actors visit various Brazilian/European states and get connected to Brazilian/European entities of interest and subsequently find potential business partners.

Dates and latest information on the Matchmaking & Information Tours are announced on the ENRICH in Brazil website. ENRICH in Brazil also offers newsletter subscription, which contains latest events, calls, and ENRICH relevant news.

ENRICH in Brazil has special services also for those who are wishing to receive a one-to-one support in business partner search.

ENRICH

YOU

I am ready to expand my business to Brazil but I need funding and more investments.

Customers of ENRICH in Brazil have the opportunity to discover diverse funding possibilities as well as receive customer-tailored funding support. Thanks to its extensive network and external service providers, ENRICH in Brazil is up-to-date with the latest available public and private funding opportunities. Customers wishing to be informed about relevant funding streams available based on their sectorial focus, regional/national origin and funding scope can receive a customized support and be guided through the application process for the funding. ENRICH in Brazil offers also trainings and sessions (e.g. "How to Speak to International Investors?") as well as provides general information on the topic.

ENRICH

YOU

I don't have an office nor required equipment in Brazil. Is there any way to overcome this obstacle?

ENRICH

ENRICH in Brazil through its network of certified Soft Landing Hubs assists European organizations in taking their first steps by providing temporary workspace at leading Brazilian business-innovation based centres. Customers of ENRICH in Brazil will have access to flexible workspaces with technology infrastructure and to portfolio of business services and networking opportunities. This enables STI actors taking their first steps into the new market to experience, taste and perceive Brazilian culture, business *milleu* and vast opportunities.

ENRICH in Brazil will act as an facilitator and interface between the organizations involved (European business actors looking for workspace and Brazilian organizations providing workspace), mediating a potential agreement. Aims of both workspace suppliers and users in terms of available space, conditions, facilities, infrastructure, price, etc. will be accessed by ENRICH in Brazil in order to determine the most suitable option for both parties.

YOU

I have high-skilled employees but they are not acquainted with Brazilian market, culture and working environment. Is there any possibility give my staff an opportunity to experience business-Brazil?

ENRICH

ENRICH in Brazil offers Secondment services. Offering opportunities for companies to provide benefits to their employees by enhancing their skills and knowledge about current and potential new markets, partners and/or competitors as well as expanding their career development. This will also contribute to have a motivated staff that will bring to the team the experience gained from an external organisation. Host organisations will obtain support from skilled individuals in their specific activities and/or projects, benefiting from an external perspective and expertise.

YOU

To operate a successful business, the local legal environment is very important. I would like to get informed about it.

ENRICH

Receiving a high-quality independent professional legal advice is essential to any business. ENRICH in Brazil offers customized and top-shelf expert legal advice on all relevant topics regarding the Brazilian markets and their challenges. It comprises case-to-case laws, policies and regulations. ENRICH in Brazil has special training sessions to help its customers protect their products and services in terms of Intellectual Property Rights.

YOU

I am a business actor in a European start-up scene. I would like to get an all-in-one information for my first-step in expanding my business into Brazil.

ENRICH

ENRICH in Brazil offers regularly Bootcamp training sessions for start-ups, entrepreneurs, developers, designers and innovation ecosystem activists. In the Bootcamp in Brazil, participants will learn how to write a business plan, identify their financial needs and prospects before going to investors to ask for funding. Moreover, it also includes an information session on funding opportunities and financial instruments for start-ups and entrepreneurs in Europe who are aiming Brazilian markets.

USEFUL LINKS

- » **ENRICH in Brazil:** <http://brazil.enrichcentres.eu/>
- » **Latest Economic Indicators:** <http://www.bcb.gov.br/?INDICATORS>
- » **Market Research:** <http://www.bcb.gov.br/en/#/n/FOCUSREPORT>
- » **OECD Economic Surveys Brazil (Feb. 2018):** <http://www.oecd.org/economy/surveys/Brazil-2018-OECD-economic-survey-overview.pdf>
- » **OECD STI Scoreboard (2017):** https://read.oecd-ilibrary.org/science-and-technology/oecd-science-technology-and-industry-scoreboard-2017_9789264268821-en#page1
- » **World Bank:** www.worldbank.org/en/country/brazil/overview
- » **European Commission:** https://ec.europa.eu/europeaid/countries/brazil_en
- » **Ministry of Science and Technology:** <http://www.mct.gov.br/>
- » **Ministry of Industry, Foreign Trade and Services:** <http://www.mdic.gov.br/index.php/english>
- » **Ministry of Finance:** www.fazenda.gov.br
- » **Ministry of Foreign Affairs:** <http://www.itamaraty.gov.br/en/>
- » **Central Bank of Brazil:** <http://www.bcb.gov.br/>
- » **Brazilian Development Bank:** www.bndes.gov.br
- » **Brazilian Federation of Banks:** <https://portal.febraban.org.br/?idioma=en-us>
- » **Brazilian Senate:** <https://www12.senado.leg.br/internacional/en>
- » **Brazilian House of Representatives:** <http://www2.camara.leg.br/english>
- » **Integration and Company Registration Department:** <http://drei.smpe.gov.br/>
- » **Projeto Crescer:** <http://www.avancarparcerias.gov.br/>
- » **European Commission – Research and Innovation Cooperation with Brazil:**
<http://ec.europa.eu/research/iscp/index.cfm?amp;pg0brazil>
- » **Roadmap for EU – Brazil S&T Cooperation:**
https://ec.europa.eu/research/iscp/pdf/policy/br_roadmap_2017.pdf
- » **Belém Statement on Atlantic Research and Innovation Cooperation:**
https://ec.europa.eu/research/iscp/pdf/belem_statement_2017_en.pdf
- » **Implementing Arrangement between the European Commission and the Brazilian National Council of the State Funding Agencies CONFAP:**
<https://erc.europa.eu/sites/default/files/document/file/agreement-EC-CONFAP.pdf>
- » **Delegation of the European Union to Brazil:** https://eeas.europa.eu/delegations/brazil_en
- » **EURAXESS Latin America and the Caribbean (LAC):**
<https://euraxess.ec.europa.eu/worldwide/brazil>
- » **Latin America IPR SME Helpdesk:** <http://www.latinamerica-ipr-helpdesk.eu/about-us>
- » **INCOBRA:** <https://www.incobra.eu/>
- » **Enterprise Europe Network:** <https://een.ec.europa.eu/>



CONTACT US AT:

brazil@enrichcentres.eu

ENRICH in Brazil is made possible with the support
of the CEBRABIC project and its partners



Fraunhofer Institute for Production
Systems and Design Technology (IPK)





Authors:

Fraunhofer Institute for Production Systems and Design Technology

Status:

June 2018



ENRICH is an initiative of the European Union, executed in Brazil by the CEBRABIC project, that has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 733531. Responsibility for the information and views set out in this publication lies entirely with the authors.