



BRAZIL'S NEW SANITATION LAW

Exploring opportunities for European companies

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EDITORIAL

THE NEW SANITATION LAW UNFOLDS SEVERAL OPPORTUNITIES THAT MAKE THE SECTOR IN BRAZIL AN ATTRACTIVE PORTFOLIO FOR INVESTMENT GLOBALLY.

We are pleased to share this eBook with more information about Brazil's new sanitation law and how European companies can take advantage of the opportunities that will unfold in the Brazilian market for the sector.

You will find an overview of the current situation and why the changes imposed by the new law are so important for a sector that has been long forgotten and underinvested in Brazil.

It is with great optimism that we see this moment for the country, where we have a unique opportunity to reduce inequality, improve quality of life, attract investments, and create jobs.

At Lide, we can be the main gateway to connect you to the right opportunities and partners in Brazil and globally. We offer you the opportunity to personally exchange information in an exclusive environment about the challenges and opportunities and expand your network with high-profile leaders.

If you would like to know more about Lide and our initiatives for the sector, please send us an email, and we will be happy to personally explain how our organisation can support your business globally.



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BRAZIL'S NEW SANITATION LAW: NEW OPPORTUNITIES FOR EUROPEAN COMPANIES

BY BRENO DIAS SILVA, CHAIRMAN OF LIDE UK

Sanitation is a sector that has been long forgotten and underinvested in Brazil. The lack of political will, the complexity in regulation, and the lack of prioritisation have resulted in a serious national problem.

The reality is tough to digest: in a country of 200 million inhabitants, there are over 100 million people without access to wastewater collection and treatment, over 30 million people without access to clean water, and almost 20 million people without access to solid waste collection and management (and those that have access to these services suffers from high inefficiencies). It goes without saying that the most vulnerable population is the one who suffers the most in this sad reality.

The good news is that the government has finally realised the importance of the sector and took the right steps with the approval of the new law to bring the much-needed infrastructure and investment.

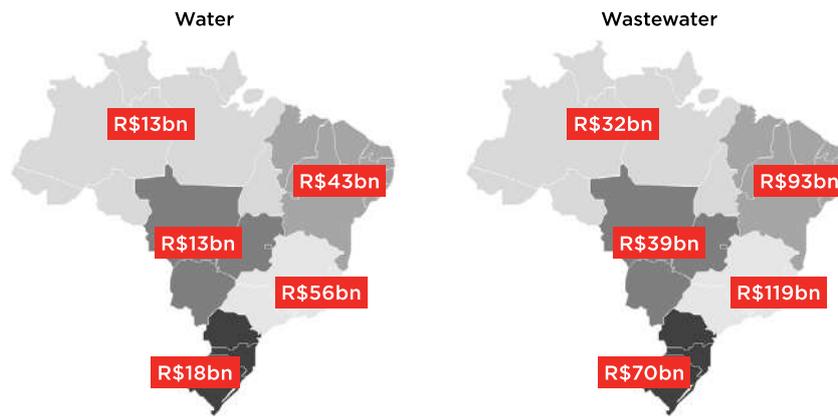
With the updated regulatory framework, over R\$700 billion in investments are expected, along with the creation of thousands of jobs, the universalisation of the services by 2033 and, as a consequence, take important steps to solve an inequality and healthcare crisis.

To become a reality, there will need to be an extensive collaborative effort between the private and public sector, and the integration with international players. Therefore, we are confident that many opportunities will unfold for European companies, which we would like to explore in four main areas.

INVESTMENT, PARTNERSHIPS, AND COLLABORATION

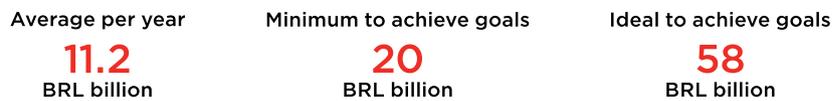
As consequence of the new law, that eliminates the free agreement between municipalities of state-owned companies making bidding mandatory, several privatisations, concessions, PPPs (Public-Private Partnerships) and PPIs (Investment Partnerships Program) of different sizes and formats are under study and being modelled across the country. It represents a significant investment opportunity but also opens up the possibility for collaboration with European companies, since only 8.6% of the water distribution and 3.9% of the wastewater collection and treatment is done by private companies.

INVESTMENTS PROJECTED BY 2033



Source: ABCON, BTG Pactual

INVESTMENTS ON THE SECTOR



Source: ABCON, BTG Pactual

EFFICIENCY, TECHNOLOGY, AND INNOVATION

The area that we see more potential in the sector for European companies to take their expertise to Brazil is with knowledge and solutions to solve the immense amount of inefficiencies across the supply chain and bring new perspectives.



INTEGRATION AND CIRCULAR ECONOMY

The sector in Brazil, so far, had timid efforts towards integrating services and solutions to stimulate the circular economy and better utilise resources. There are several opportunities to drive circular economy initiatives such as converting sludge into fertiliser, using plasma technology to convert sludge into useful materials for the construction industry, the use of renewable energy to power treatment plants, reclaimed water and many more.

UNIVERSALISATION OF THE SERVICES

The new law establishes clear and enforceable universalisation goals to be achieved by states and municipalities with the support of a new federal regulator for the sector (ANA - National Water Agency). That means that by 2033, 99% of the population must have access to clean water, and 92% of the population must have access to wastewater collection and treatment. In case states and municipalities can't organise themselves to create serviceable regions and achieve the goals, the federal government will be able to step in. It creates an important window of opportunity for European companies interested in the sector in the country since it allows the development of new markets and stimulates competition.

There are certainly high hopes for the sector and a set of great opportunities will open up for European companies to invest in the sector in Brazil. At Lide, we can be the main gateway to connect your business with the right opportunities in the country.

BRAZIL'S NEW SANITATION LAW OPENS THE DOOR FOR ECONOMIC AND SOCIAL INVESTMENTS

BY BENEDITO BRAGA, CEO OF SABESP

Much like the country, Brazil's sanitation sector presents big business opportunities and potential for growth. The population has increased at a fast rate over the last century however the rate of urbanisation has not followed in line with this, leaving a large gap in the provision of public services.

In more developed states like São Paulo, the lack of public services are concentrated within areas of informal settlements, i.e. favelas. These are areas where sanitation service providers have traditionally faced difficulties in accessing, as they tend to be in protected areas or landslide-prone zones. Until recently, sanitation companies have been prohibited from operating in these areas leaving the communities and the environment of these regions in a state of neglect. In other states, the lack of investment and planning has left approximately half of the population without sanitation services, specifically wastewater collection and treatment services.

In the last couple decades, people have begun to realise and understand the correlation between sanitation and health. Citizens are happy and willing to pay for these services but they want and need them immediately. However, the government does not have sufficient resources to finance the necessary infrastructure.

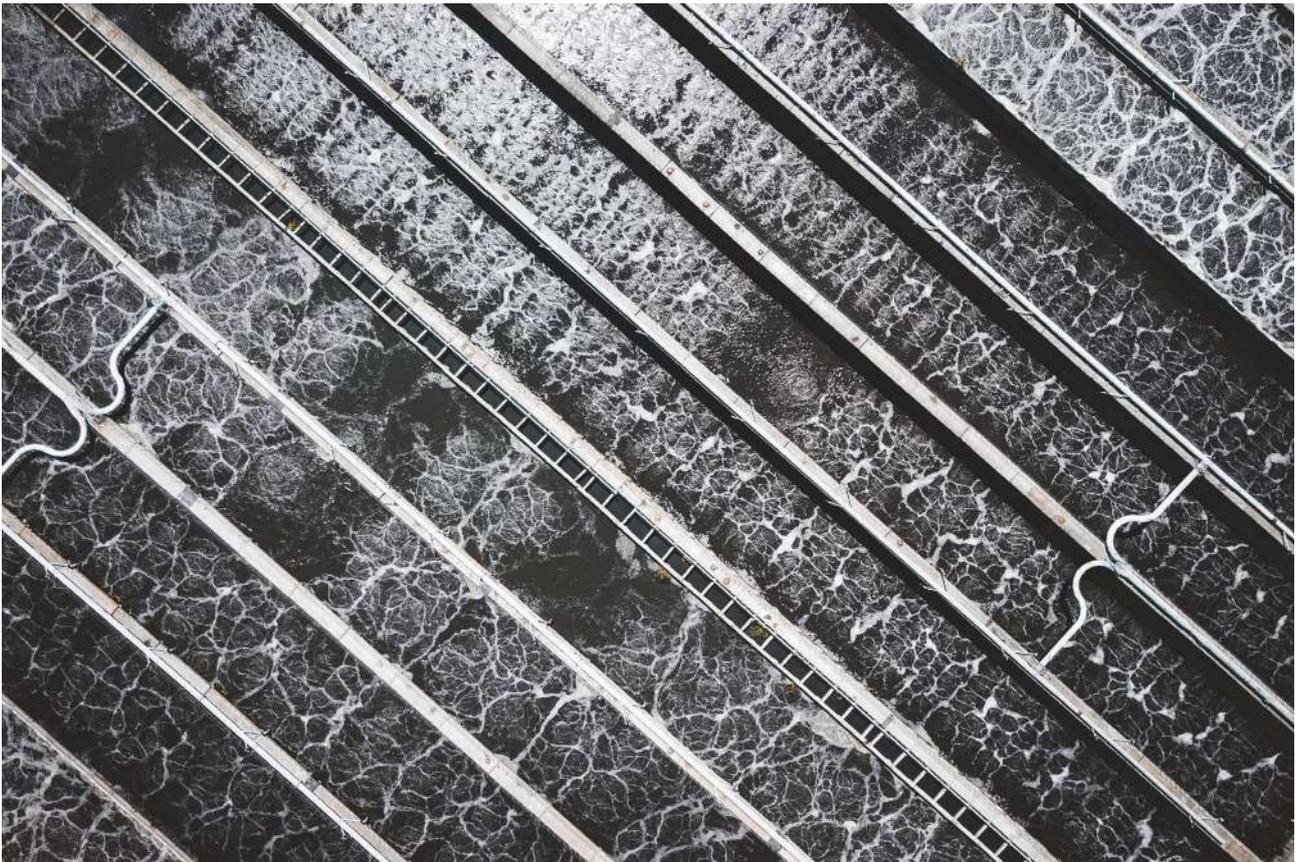
The sanitation sector needs to grow in order to meet the excess in consumer demand. The new law presents many business opportunities to companies and potential investors that have the resources and technical know-how, such as in the building of infrastructure to convert waste to energy and the disposal of solid waste.

The new regulations will provide the right incentives for performance, security to investors and guarantee fair prices to consumers. Companies that meet the government's requirements and standards will receive government financial incentives, such as bonuses, creating a mutually beneficial cycle.

Sabesp is one of the world's largest sanitation companies, supplying over 28 million people with water and providing sewage collection services to over 24 million people in Brazil. We have the capacity, technology and experience necessary to confront new challenges, start new business ventures and begin operating in new areas. We are prepared and one step ahead.

The new law gives sanitation companies the opportunity to offer their services in areas of informal settlements and Sabesp already has a program set up just for this. Água Legal (Legal Water) provides clean water to these communities, which have in some way been side-lined.

Overall, this law not only presents business opportunities but an opening for companies to contribute to a social cause, in working together with the government to provide a vital service to society.



THE ECONOMIC IM PACT OF BRAZIL'S NEW SANITATION LAW

BY ALEXANDRE MANOEL, ECONOMIST (FORMER SECRETARY OF THE MINISTRY OF ECONOMY)

The growth of the Brazilian economy has not been vigorous in recent years. In order to achieve sustainable growth rates in the near future - around 3.0% per year - the reform agenda must continue to advance, which will mean adjusted public accounts and increased productivity.

In that context, Brazil's new sanitation law represents a great opportunity for investors, service operators and companies engaged in this market to increase productivity, boost employment and income as well as enhance the standard of living of millions of poor Brazilians.

According to the new law, basic sanitation is defined as a public service provided by all the infrastructure and facilities used in water supply, waste collection, sewage systems, and the drainage of rainwater.

In Brazil, those public services are provided heterogeneously among states and regions. Waste collection is not a major problem mostly because it is already provided by private companies which operate that service for municipal governments. Water supply is also not a major problem in the Midwest, South and South-east regions of Brazil. However, access to sewage systems and the drainage of rainwater are problematic throughout Brazil, especially in the North and Northeast regions.

TABLE 1 SHOWS THE PROPORTION OF BRAZILIAN HOUSEHOLDS WHICH HAVE ACCESS TO WATER SUPPLY AND SEWAGE SYSTEMS BY

Region	Water Supply (%)	Sewage (%)
North	57,49	10,24
Northeast	73,25	26,87
Southeast	91,25	78,56
South	89,68	43,93
Midwest	90,13	53,88
Brazil	83,47	52,36

Source: Instituto Trata Brasil.

Considering the situation portrayed in Table 1, many analysts infer that there are billions of dollars to be made in the Brazilian market and such investments should be very profitable. However, the new legal sanitation framework is still in the making. The law created new legal institutes, as "norms of reference", which will demand a lot of innovation and cooperation between the private and public sectors to work properly.

Thus, it is very important for private companies engaged in this market to actively participate in its regulation as well as in providing solutions for innovation. Investing in advance, for instance, in prospective studies, represents a huge advantage to cash in on the opportunities that are on the verge of arising.

It's also worth mentioning that the discussion leading to the approval of the law, on its own, has already encouraged some states to privatize their sanitation companies, generating a lot of opportunities for private service operators. And the privatization of state owned companies is expected to intensify over the next years as the new law creates a series requirements in terms of corporate governance that the public sector will not likely be able to accomplish, creating new opportunities for private sector service operators and investors.

In a nutshell, the Brazilian sanitation market represents a great investment opportunity for private sector service operators and investors. In that regard, it is important to emphasize that in order for these opportunities to materialize, the public and private sectors must both participate actively in its regulation which, once successfully implemented, will definitely contribute in boosting the economy's productivity and overall performance.



BRAZIL'S NEW SANITATION LAW - AN OVERVIEW

**BY PEDRO SERAPHIM, PARTNER AT TOZZINI FREIRE, CO-HEAD OF
INFRASTRUCTURE AND ENERGY PRACTICE**



After many years of stalling on political debates, the Brazilian Congress has just approved a bill of law that is expected to unlock Brazil's sanitation sector for private investment.

With more than 200 million inhabitants and more than 5,000 cities, the country has always suffered from a poor and confusing regulation structure controlled by municipalities, but with a significant weight of state-owned enterprises (SOEs) created by some states.

With the budget limitations of states and municipalities, and with the lack of political will to implement projects that require commitment of more than one mandate, nearly 60% of the population do not have sewage treatment, 50% have no sewage collectors, and 20% have no access to treated water, with only 6% of the current sanitation infrastructure being privately owned.

Considering this dreadful scenario, the Federal Government claims leadership for the future of the sector to solve this gigantic gap, fixing universalisation goals for 2033, through the new law recently approved by the Congress.

THE NEW LAW IS BASED ON FOUR MAIN PILLARS:

- Harmonisation of the regulation in the sector;
- Stimulate economies of scale;
- Creating conditions for observance of rule of law throughout the sector to ensure legal security;
- Creation of a competition environment.

The National Water Agency (ANA) will now have the task of creating a federal guideline to steer the several municipal sanitation regulations in the right direction and follow up on the implementation of the development plans by the municipalities to achieve these goals. Those will include rules covering tariff fixation and revision methods, risk matrix, rules creating conditions for project finance, and setting precedents for interpretation and application of the rules.

There will be funding and other incentives for the municipalities to adopt ANA guidelines, which will foster standardisation of the regulations. A crucial benefit of this process will be to simplify the process of understanding the rules governing the sector, assuring that application will be harmonised throughout the country.

From now on, new projects will be awarded exclusively as a long-term concession, through open competitive processes. SOEs and private investors will compete in these bids in identical conditions. This is particularly important in Brazil, as the sector is in a certain way dominated by companies formed by the states, who have been signing contracts with the respective municipalities to provide on their behalf the water and sewage services (known as “program contracts”). These contracts are obtained without competition, causing in many instances the low involvement of private companies in the sector. Also, these SOEs tend to suffer with the states’ budget limitations, resulting in poor implementation of expansion and maintenance plans.

The new law was sent to the President in late June, and a number of vetoes were made. However, there is one that is more relevant, which was the elimination of the new law’s article 16, whose intent was to authorize the renewal of the program contracts currently existing. With the veto, the renewal of such agreements will not be authorized, and therefore a new public bid will have to be held in order to find the new concessionaire for that particular area. To date, there was no voting on those vetoes at the Congress, but this will be the final step in the issuance of the new law.

Since the implementation of universalisation plans will require significant investments by SOEs, it is expected that this will drive privatisations throughout the country. BNDES, the Brazilian Development Bank, is already structuring transactions in several states, involving either a full privatisation or offerings of specific services or regions to private operation.



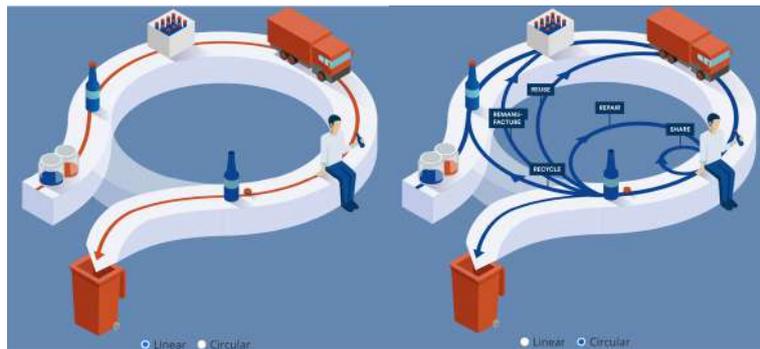
According to the new law, there will be enhanced binding mechanisms to stimulate neighbour municipalities to form clusters, so that projects will gain scale and sustainability. BNDES will also take the lead role in modelling these mechanisms. The plan is to attract investments to the whole country and not only for the already big cities.

The new sanitation law is expected to have a significant role in moving the Brazilian economy in the years following the Covid-19 crisis. The estimates for all businesses are that it can originate amounts to R\$ 700 billion (approximately US\$ 130 billion), not to mention the strong impact the law will have on public health, environmental, and development matters throughout Brazil.

CIRCULAR ECONOMY AS A BUSINESS MODEL AND DRIVER OF INNOVATION

BY FABIANA OSCARI-BERGS, CEO OF LIDE DE

Looking beyond the current 'make, use, dispose' extractive industrial model, a circular economy aims to redefine growth, focusing on positive society-wide benefits. Circular Economy is more than Recycling. It entails gradually decoupling economic activity from the consumption of finite resources, and designing waste out of the system. Digitalization can support the circular economy business model by identifying materials.



Source: Eurostat

THE BENEFITS OF THE CIRCULAR ECONOMY

The circular economy offers an opportunity to reinvent our economy, making it more sustainable and competitive. This brings benefits for businesses, industries, and citizens such as¹:

- More innovative and efficient ways of producing and consuming;
- Protection for businesses against scarcity of resources and volatile prices;
- Opportunities for local jobs and social integration;
- Optimisation of waste management which boosts recycling and reduces landfill;
- Energy savings as less production processes requires less energy;
- Benefits for the environment in terms of climate and biodiversity, air, soil and water pollution.

THE BUSINESS MODEL DEPENDS ON THE INITIATIVES

This Business Model can be very efficient when it is supported by initiatives like the European Commission has been issued. On 11 March 2020, the European Commission adopted a new Circular Economy Action Plan - one of the main building blocks of the European Green Deal, Europe's new agenda for sustainable

¹Source: Eurostat / Circular Economy / European Union

growth. The new Action Plan announces initiatives along the entire life cycle of products, targeting for example their design, promoting circular economy processes, fostering sustainable consumption, and aiming to ensure that the resources used are kept in the EU economy for as long as possible. In addition, the circular economy has strong synergies with the EU's objectives on climate and energy and with the Commission's package on 'Clean Energy for all Europeans'².

In this case the European Union creates the framework conditions and the market begins to transform itself from the traditional linear economy (make, use, dispose) to a circular economy (make, use, recreate).

CIRCULAR ECONOMY & SUSTAINABILITY STRATEGY: THE CONSTRUCTION AND CHEMICAL INDUSTRY REFERENCE CASES

The chemical industry in Germany wants to be greenhouse gas neutral by 2050 at the latest. To achieve this, the expansion of recycling, for example chemical recycling or the direct use of CO₂, and the use of alternative raw materials are being promoted. The requirements of industrial customers, investors and consumers are driving this change. The chemical companies are therefore working together with the customer industries on sustainable solutions for more recycling and resource efficiency. This includes, for example, the development of an adhesive that enables recycling or, in general, the substitution of problematic ingredients.³ For example, operators of sewage treatment plants are increasingly concerned with microplastics in wastewater. Chemistry can help its customers to purify the wastewater produced before it is passed on to the municipal sewage treatment plants or to remedy this by working on low-wear and weather-resistant plastics and, on the other hand, on biodegradable and recyclable materials.⁴

Due to the linear economic model ('make, use, dispose'), the construction industry is responsible for over 30% of the extraction of natural resources and for 25% of the solid waste generated worldwide. Over the last decades, the construction industry are adopted the Circular Economy model with a greater potential of reducing the waste generation and resources extraction.

The Madaster project, which is funded by the European Union Horizon 2020, represents the circular economy very concretely. Madaster's mission is to make material available forever by giving it an identity like a 'passport'. When materials have an identity, they can never disappear in anonymity as waste. Every building becomes a depot of materials with a certain value.⁵

The platform is designed as an open data platform and enables the industry to integrate solutions such as marketplaces, property valuation and management. Product and material data can be stored, enriched, shared and managed. A material passport gives insight into the materials, components and products used to create a building, and into their quantities. Additionally, the material passport contains information on the quality of materials, their locations, and their monetary and circular value. This way, it becomes a lot easier to reuse materials, minimize waste, and to reduce the cost of material consumption. Improved insight into the use of materials will stimulate the circular economy and will lead to better design solutions.

If you consider the needs of the Brazilian sanitation market and the ongoing better accessibility to this market for the private sector, together with the European transition from a linear to circular economy, demand and supply can be brought together, especially bringing in the European experience of circular economy.

²Source: European Union

³Source: Germany Chemical Industry Association

⁴Source: Germany Chemical Industry Association

⁵Source: Madaster



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(Former Secretary of the Ministry of Economy)



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Co-head of Infrastructure and Energy practice



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ABOUT LIDE:

Lide is a membership organisation that offers exclusive networking opportunities and experiences. Founded in 2003 by the governor of the state of Sao Paulo, Joao Doria, Lide has quickly expanded its presence internationally and has a network of 1,700+ companies and 3,400+ high profile business leaders. In Europe, Lide has its presence in the UK, Germany and Italy.

We offer an exclusive platform to be informed and inspired, expand your network, and accelerate business opportunities.



INSTITUTIONAL SUPPORT:



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