Brazil: Construction

This country-specific Q&A provides an overview to construction laws and regulations that may occur in Brazil.

For a full list of jurisdictional Q&As visit here
1. **Is your jurisdiction a common law or civil law jurisdiction?**

Brazilians is a civil law jurisdiction, even though some contractual practices have been incorporating legal concepts more typical of common law systems. Both German and Italian legal systems highly influenced Brazilian contractual legal framework.

2. **What are the key statutory/legislative obligations relevant to construction and engineering projects?**

Brazilian system is not heavily regulated in contractual terms for private projects. Brazilian Civil code contains some general provisions for less complex construction contracts. In our understanding, such legal provisions shall not be automatically applicable to more complex contracts, such as EPC Turnkey Contracts.

The only contractual statutory obligation under Brazilian Law that will most certainly be applicable to any construction contract of “considerable works” is the one set forth in Article 618 of the Brazilian Civil Code, which establishes a minimum of 5 years’ constructor warranty period for any defects of the works that is related to solidity and safety.

As we will explain ahead, public procurement and public contracts are heavily regulated, in accordance with Brazilian Law.

Other statutory legal obligations will be explained in detail in the following question.

3. **Are there any specific requirements that parties should be aware of in relation to:**
   (a) Health and safety; (b) Environmental; (c) Planning; (d) Employment; and (e) Anti-corruption and bribery.

   **(a) Health and safety;**

   In Brazil the Health and Safety are governed by law, rules and regulations spread across all federated entities in Brazil (Federal, State and Municipal). There is not a particular legislation regulating the subject. Ministry of Labour Ordinance No. 3.214/1978 is the closest to a codification at Federal level.

   Ministry of Labour Ordinance No. 3.214/1978 compiles the technical notes for work environment such as exposure to toxic chemicals, excessive noise levels, mechanical dangers, heat or cold, or unsanitary conditions, which guidelines are enforced in all States. However, despite the compilation, there are other rules that should be considered when a project is intended in Brazil.

   For instance, employers are subject to collect a Labour Insurance on the payroll depending on the risk of the activities employees perform. The nominal rates of such insurance are 1%,
2% and 3%. However, the rate varies (lowered or increased) depending on employer’s performance (i.e. risk mitigation, compliance to law, number of actual labor accidents) in comparison to its peer companies. This is a simple example of the complexity of the occupational environment in general terms.

The example above is restricted to the Federal Level. When the State and Municipal levels are considered, complexity increases exponentially. The major challenge is to comply with all regulation in different levels and the public administration interpretation of such rules to mitigate the risks, consequently mitigating contingencies and reducing employees’ exposure to hazard.

(b) environmental issues;

The Constitution of the Federative Republic of Brazil sets forth a vertical structure in the distribution of legislative competencies: starting from the Union to the States, and from those to the Municipalities. Thus, the Federal norms will always be more generic and abstract than the state norms, and these, in turn, more than the Municipal ones. Norms of either a specific or a supplementary nature must abide the guidelines and principals established by the more general norms.

In such context, Federal Law 6,938 of 1981, laid down the National Environmental Policy and made Environmental licensing mandatory throughout the National territory for activities that are effective or potentially polluting or capable of causing environmental degradation.

Even though the legislation determining licensing is federal, such licenses are usually issued by State environmental agencies and are, thus, subject to State level laws and regulations. Hence, a project in the State of Bahia can have substantially different requirements from a similar project in the State of Paraná.

Environmental licensing process consists of three types of licenses. Each is required in a specific licensing step, but all three are required for a single project:

Preliminary License (“Licença Prévia”)

It is the first stage of licensing and prior to the implementation of the project, in which the Licensing agency assesses the future location and conception of the enterprise, attesting its environmental viability and establishing the basic requirements for the next phases. Complementary environmental studies such as EIA (Brazilian acronym of Environmental Impact Study), RIMA (Brazilian acronym of Environmental impact Report) or RCA (Brazilian acronym of Environmental Control Report) may be required at this stage.

Installation License (“Licença de Instalação”)
Once the initial design is detailed and environmental protection measures are defined, the Installation License must be requested, whose concession authorizes the beginning of the construction of the project and the installation of the equipment.

*Operation License (“Licença de Operação”)*

The Operating License authorizes the operation of the enterprise and must be required after the environmental agencies verifies the effectiveness of the environmental control measures established in the conditions of the previous licenses.

Finally, it is important to refer to Federal Law No. 9,605 of 1998, which sets forth criminal and administrative sanctions derived from conducts and activities harmful to the environment. Under Brazilian Law, environmental crimes are among the few that may be imposed to legal entities, which penalties vary from heavy fines to either temporary or permanent suspension of activities.

In addition to environmental licenses, there are a number of permits that are complimentary to the environmental licenses and must be obtained to comply to environmental law.

(c) planning;

Considering that federal, state and local government have the concurrent delegation and authority to issue laws in some key matters (i.e. environmental, health and safety, zoning, tax, etc.) it is not difficult to understand the number of possible conflicts that could arise from such a triple legal delegation (legal and territorial). Conflicts are not restricted to zoning laws. The company shall also comply to tax laws, environment laws, among others.

As to mitigate the risk of non-compliance to laws (federal, state and local) it is important to perform studies regarding the feasibility of the project, taking into consideration also the geographic location. Location can be determinant in the economic feasibility of the project, as local laws can impose a huge burden into the project.

(d) employment; and

In Brazil, there are general and complex rules regarding employment. Since 1960 Labour Law and relevant Courts of Law have been over protective to employees. Despite some recent modification in the law and courts’ interpretation of the law, in recent years (Labour Reform), there is room for improvement.

Considering that the construction sector is people-intensive, authorities issued specific rules that governs such sector. For example, in a typical Engineering Procurement and Construction agreement the contractor may register the construction site as an “independent
entity” with the authorities in order to limit tax and labour contingencies.

One distinguishing feature of the Brazilian law regarding labour that directly affects people-intensive industries is the subsidiary liability that affects contracting parties. Considering the mixed nature of rights and obligations of the several stakeholders in an EPC Agreement, and that Brazilian law and authorities have a limited understanding of EPC agreements, a thorough analysis of the project and the contracts governing any given project is necessary in order to adapt the already tested and well-known structures of the sector to a specific project.

(e) anti-corruption and bribery.

The Companies’ accountability for corruption (and not only for the individuals) is a rule under improvement in Brazil. Its relevance has been consolidated in the Organization for Economic Cooperation and Development (OECD) Convention on combating Corruption of foreign public officials in international Business Transactions of 17 December 1997, which prescribes the responsibility of Companies’ for the corruption of foreign resources.

In this context, Law No. 12,846, of August 1st, 2013, also known as the Anti-Corruption Law, regulated by Decree 8,420 of 2015, brought some innovations to our legal system, such as:

a) Predicted the possibility of objective liability of companies (regardless of the existence of fault), as a result of acts harmful to the national or foreign public administration;

b) Encouraged prevention, treating differentiated way companies that have an adequate Compliance Program;

c) Established the leniency agreement, benefiting those who collaborate with investigations of Illicit acts, fostering collaboration between companies and the Public Administration.

In such Law, there is no accountability for private corruption, but only in the public sector.

On the other hand, there are other norms existing in Brazilian legislation to curb corruption practices, such as:

° Criminal Code (Legislative Decree n. 2,848 of 1940)The corruption acts are stated in the criminal sphere, such as crimes against the public administration, against the economic order and against the tax order. Both Criminal Code and Anti-Corruption Law impose liability for acts against foreign public administrations. The Criminal Code has specific provisions regarding active bribery and influence peddling in international business transactions. Money laundering or wrongdoing related to financial statements are punished by specific laws, such as the Tax Crimes Law and the Anti-Money Laundering
Law.
- Administrative Misconduct Law (n. 8,429, of June 2nd, 1992) is the main instrument of repression of corruption for the public officials.
- Public Officials Law (n. 8,112, of December 11th, 1990) sets forth responsibilities to the public officials who incur in practices related to corruption.
- The Public Procurement Law (n. 8,666, of June 21st, 1993) establishes rules of public bids, contracts and punishes irregularities practiced by suppliers and contractors.
- State-Owned Companies Law (n. 13,303, of June 30th, 2016) establishes specific rules for state-owned companies in terms of corporate governance, public tenders and contracts, compliance programs and control by public entities.

It is important to mention, the Supreme Federal Court declared on September 17th, 2015 the unconstitutionality of political contributions from domestic or foreign companies to political parties or candidates.

Brazil has ratified several conventions related to corruption, including:

- Convention on combating Corruption of foreign public officials in international Business Transactions of 17 December 1997 of Organization for Economic Cooperation and Development (OECD) (Decree n. 3,678, of November 30th, 2000);
- The Inter-American Convention against Corruption (Decree n. 4,410, October 7th, 2002);
- The United Nations Convention against Transnational Organized Crime (Decree n. 5,015, of March 12th, 2004);
- The United Nations Convention against Corruption (Decree n. 5,687, of January 31st, 2006).

Finally, during car wash operations, Brazil has signed several cooperation agreements with other countries to fight against corruption and bribery.

4. **What permits/licences and other documents do parties need before starting work, during work and after completion? Are there any penalties for non-compliance?**

In addition of the Licenses of the entrepreneurship, mentioned previously on item 3.b, there are several permits which may be required by different public officials depending on the type and needs of each Construction Project. All permits imply in penalties and other sanctions if not obtained. However, the amounts and eventual sanctions will vary by entity and by relevance. Here are some examples of permits usually required in Brazil:

- Federal Technical Registry at IBAMA – Certificate of company regularity;
- Effluent Treatment Station Operation License;
- Permit of operation of ambulatory and / or nursery;
- Permit to Use Thermonebulization for Mosquito Control;
- Operation License Concrete Plant, Material Site, Industrial Plants and Central Construction;
Office operating license and cafeteria;
License to use and carry chainsaw (when necessary);
Grant for Water Resources (when necessary);
Authorization for mineral extraction and / or mining right (when necessary);
Road Transport License for dangerous goods and special loads (when applicable);
License for use and storage of hazardous materials (fuels / service station, chemicals, flammable products);
Operating permit for use, handling and storage of construction materials (miscellaneous);
Authorization for the Deposit of Solid, Organic and Non-Recyclable Waste;
Import and transport licenses.

5. **Is tort law or a law of extra contractual obligations recognised in your jurisdiction?**

Legal provisions equivalent to tort law are expressly recognised by Brazilian law, especially under Title IX, Book I, Special Part of Brazilian Civil Code (“BCC”).

As a rule of thumb, Brazilian law establishes that any person who causes a damage to another, by voluntary act or omission, negligence or imprudence, including personal injury, material or moral damage, is obliged to repair it (Articles 186 and 927 of BCC). The indemnity shall be measured by the extent of the damage (Article 944 of BCC), therefore included any compensation for direct, indirect and consequential damages, as well as loss of profits, loss of revenue and related amounts.

Regarding construction law, Article 937 of BCC expressly imposes on the “owner” the liability for damages caused to third parties resulting from the falling of the building into ruin due to poor maintenance. In other cases, liability for damages caused to third parties by the “contractor” may be jointly and severally imputed to the “owner”, depending on the circumstances of each case.

Additionally, it shall be noted, in relation to construction projects, that Brazilian law provides extensive regulation regarding non-contractual liability of environmental nature. Brazilian courts, in this respect, have consolidated an understanding favourable to the imputation of joint, several and objective civil liability to “contractors” of projects that result in environmental damages of any kind.

6. **Who are the typical parties to a construction and engineering project?**

Typical parties in construction and engineering projects in Brazil vary in accordance with the specific set up of each single project.

A typical project would involve a Project Owner (“Dono da Obra”), that it is either a large company that is investing in the improvement of its assets or a Concessionaire, that is contracting the works for the implementation of the assets object of the Concession. For
public procurements, the Owner can also be a public company or a public entity (Union, State or Municipalities).

In the Contractor’s side, there may be different kinds of Contractors, depending on the project’s particular characteristics and the procurement method chosen. There is usually the Civil Construction contractor, the Design Team, the System Supplier and other key suppliers. In EPC Projects, the main suppliers will be integrated in a Consortium, or even as Subcontractors of the EPC Contractor.

Not rarely the Project Owner will make use of consultants to work as their inspection team or Owner’s Engineer. In some projects that role is carried out by an internal team of the Owner.

In Project Finance structures, the financing agents will often be involved during the construction contracts negotiation.

In Public Procurement Projects, external public audit offices (“Tribunais de Conta”) may be heavily involved in the audit of the contract and its amendments. Their participation has been posing some complex legal challenges in recent public projects in Brazil.

7. **What are the most popular standard forms of contract? Do parties commonly amend these standard forms?**

Standard forms of contracts are historically not frequently applied in construction projects in Brazil. Only recently, possibly as a result of a rearrangement of the market forces, with a deeper involvement of foreign companies in the contractor’s side, standard forms are becoming more usual. From our experience, the FIDIC Rainbow (particularly the Silver Book) is the one more widely applied form in Brazil.

8. **Are there any restrictions or legislative regimes affecting procurement?**

Public procurement procedures in Brazil are heavily regulated by Law 8.666/1993. Such regulation has been under severe criticism, since it is considered too rigid, even though it was not able to prevent all corruption wrongdoing notoriously reported in Brazilian recent history. There are at least two new projects of legislation on this matter under analysis of the Brazilian Congress.

Private procurement procedures in Brazil do not impose particular restrictions to the parties other than legal principles applicable to contracts in general.

9. **Do parties typically engage consultants? What forms are used?**

Usually, consultants are widely hired during the development and implementation of a Construction Project. It will vary depending on the type and the size of the entrepreneurship.
Regularly engineers, architects, legal and financial advisors are engaged. Other experts may be required, such as geologists and environmentalists. Also, it is common to require assistance of import and export of goods and equipment, customs clearance and fiscal services.

10. **Is subcontracting permitted?**

In private projects, typical subcontracting clauses would only allow such practice by the contractor, when previously approved by the Owner. Some clauses would include a limit to subcontracting without previous approval, or even a list of predetermined subcontractors.

In public projects, the Brazilian Legislation (article 7.2 of Lei 8.666/93) allow subcontracting only up to the limit previously set forth by the public administration. The idea is that a “substantial portion” of the works shall not be subcontracted.

11. **How are projects typically financed?**

Brazil is currently going through a transformation in the financing industry for infrastructure projects. Historically, government (federal, state and local) were the main financiers of such projects, for a number of reasons. We include the high interest rates on sovereign debt, political instability and unsteady GDP growth.

In the last two decades, the main source of infrastructure financing, in Brazil, has been state owned development banks, specially the BNDES (Banco Nacional de Desenvolvimento Econômico e Social). According to a recent report of ANBIMA (Associação Brasileira das Entidades dos Mercados Financeiros e de Capitais), in the year 2017, BNDES was responsible for 73.2% of all disbursements in long term financing sources.

Brazilians’ criticism to BNDES (for possible political influences in the credit analysis) combined with lower interest rates on Brazilian sovereign debt is leading a change in the infrastructure sector financing. Capital market for infrastructure, in Brazil, is still very incipient, but it is the hope for the industry’s financing.

Law 12.431/2011 established the incentivized infrastructure debentures, which, among other aspects, set forth tax benefits for individuals investing in such debt notes, as a way to foster capital markets for infrastructure financing. In 2014, the incentivized infrastructure debentures accounted for BRL1.83 Billion in long-term financing, corresponding to less than 1% of deployed capital; in 2017, those debt notes corresponded to approximately BRL 22 Billion. The tax benefits on the incentivized infrastructure debentures are in the process of being extended to legal entities as to provide additional market for such notes, and, consequently, more available funds to the industry.

Capital markets are more susceptible to market conditions, when compared to state owned
development banks. Hence, to make capital markets a financing source for Brazilian infrastructure, Brazil will have to provide investors with strong signals of political stability and serious commitment to balance its public finance.

12. **What kind of security is available for employers, e.g. performance bonds, advance payment bonds, parent company guarantees? How long are these typically held for?**

Different kinds of securities are used in the Brazilian context of construction projects. As a guarantee of the contractor’s performance, the more typical one is the Performance Bond. Less commonly, but also possible for this same goal, parties make use of first demand bank guarantees. These Performance Guarantees usually must be in full force and effect until at least the Provisional Acceptance of the works. In some cases, sometimes with a percentage reduction, such guarantees will remain in force until the final acceptance of the works.

Advance Payment Bonds or Bank Guarantees can be used as guarantees of advance payments made by the employer before the execution of the works. Usually it will be returned to the contractor when all advance payment has been fully amortized by the execution of the works.

Parent company guarantees are sometimes issued in the context of negotiations, however, in our experience, it usually doesn’t substitute the issuance of other insurance or bank guarantees.

13. **Is there any specific legislation relating to payment in the industry?**

Brazilian legal system does not bring specific legislation relating to payment in the construction industry. The payment conditions will therefore be subject to general commercial rules set forth in the Brazilian Civil Code.

For public projects, Public Audit Offices (“Tribunais de Contas”) will audit payments made by the public administration. They have some specific understandings on what can constitute payment wrongdoings in the public sector. It is important to be aware of such understandings.

14. **Are pay-when-paid clauses (i.e clauses permitting payment to be made by a contractor only when it has been paid by the employer) permitted? Are they commonly used?**

Brazilian legislation does not have any specific provisions regarding “pay-when-paid” clauses.

That does not mean that such condition may be “bullet proof” under our legal system. Brazilian law establishes a statutory duty for both parties to act in good faith. It also establishes that one party cannot be benefited from a contractual condition that such party acts maliciously to avoid happening. For those reasons, any attempt to adopt these kinds of
provision will only be solid if the Subcontractor is effectively granted the right to seek for its rights under the contract. If specific clauses or the actual behaviour of the party prevent the Subcontractor from seeking its rights that may easily be considered void under our legal system.

Notwithstanding it can bring some legal challenges, this sort of provisions is not totally rare in our contractual practices. A recent research made by our firm on this subject showed that our courts still didn’t have the opportunity to form a strong precedent on such matter.

15. **Do your contracts contain retention provisions and, if so, how do they operate?**

It is not unusual to have retention provisions as a form of performance financial guarantee. The existence of such retentions will therefore be related to the specific system of contract performance guarantees agreed in the contract. If for instance the contractor is obliged to provide a Performance Bond, then a retention provision will not make much sense.

Usually this provision establishes a fixed percentage of each payment to be retained by the employer until the final delivery of the project by the contractor.

16. **Do contracts commonly contain delay liquidated damages provisions and are these upheld by the courts?**

Liquidated delay damages are very common provisions in Brazilian contractual practices, including in construction contracts. Such conditions are usually upheld by our courts to the extent that is not considered abusive, which may happen for example if the actual amount the LD is clearly excessive in relation to the contract value.

17. **Are the parties able to exclude or limit liability?**

Almost every construction contract in Brazil would contain a “limitation of liability clause”, establishing some limits or even excluding the party’s liability under certain situations, such as indirect losses or losses of profits. Such clauses would not rarely contain exceptions in which case the limitations do not apply, such as “gross negligence” and “wilful misconduct”.

Despite its common use, the fact is that this sort of provision may still face some legal challenges to be fully upheld in court, for different reasons. First, some legal concepts clearly imported from other legal systems, such as “indirect loss” and “gross negligence” do not have a clear conceptual parallel in our legal system, which may bring some interpretation uncertainty. Besides, considering that our Civil Code does not bring any statutory provision clearly allowing “limitation clauses”, it will not be unlikely that Courts may be resistant to apply such limitations, in specific cases.

For that reason, it is our understanding that, in Brazil, “limitation clauses” will more likely
better interpreted in the context of arbitration procedures, than in public jurisdiction.

18. **Are there any restrictions on termination? Can parties terminate for convenience? Force majeure?**

Termination of private contracts is governed by Chapter II, Title V, Book I, of the Special Part of BCC. In general, the private contracts can be terminated for three (3) different reasons:

(i) negligent non-performance, in which event the contract may be unilaterally or mutually terminated. The defaulting party shall be liable for damages caused to the other party, pursuant to Article 475 of BCC;

(ii) voluntary non-negligent non-performance, in which event the contract may be unilaterally or mutually terminated, especially by convenience of one or both parties. Being unilateral the termination for convenience, it will only take effect after the end of a period compatible with the amortization of any substantial investments that the other party has reasonably done in order to perform the contract (Article 473 of BCC); and

(iii) involuntary, non-negligent non-performance, in which event the contract is lawfully terminated, especially in case of force majeure events. If the force majeure event occurs during any extension of time imputable to the “contractor”, the latter may not invoke such event for avoidance of responsibilities related to the non-performance of the contract.

Public construction contracts, in turn, may not be terminated for convenience of the contractor. Termination due to non-performance of obligations attributed to the Public Administration, as well as to force majeure events, must be operated only through specific lawsuits.

19. **What rights are commonly granted to third parties (e.g. funders, purchasers, renters) and, if so, how is this achieved?**

Brazilian law recognizes different rights and collateral warranties in favour of third parties who take part in construction projects. For this purpose, such intent shall be preferably expressed in the relevant contracts.

The different forms of project financing in Brazil consider several possibilities for the structuring of collateral warranties and third-party rights, including: (i) pledge or fiduciary sale of shares and assets; (ii) pledge or fiduciary assignment of rights and receivables; (iii) corporate bank guarantees; (iv) parent company guarantees; (v) mortgage or fiduciary sale of land and buildings; and (vi) step-in rights. Moreover, especially in favour of purchasers, Brazilian law also recognizes institutes such as “reserve of ownership” and “fiduciary alienation” (“trust receipt”), among others.
Depending on each asset type, said securities shall require prior registration with the relevant public registry, since Brazilian law does not recognize “blanket liens”.

20. **Do contracts typically contain strict provisions governing notices of claims for additional time and money which act as conditions precedent to bringing claims? Does your jurisdiction recognise such notices as conditions precedent?**

Construction contracts in Brazil generally provide well-defined procedures for filing of the claims for time extension and/or reimbursement of additional costs. Such provisions usually include deadlines for the sending of the notifications of claims, under supposed penalty of loss of such rights.

Notwithstanding this, Brazilian courts do not generally recognize the validity of contractual prescriptive periods, especially if they are inferior to those recognized by law. This interpretation is based on Article 192 of BCC, in accordance with which “the prescriptive periods cannot be changed by agreement of the parties”.

For similar reasons, notifications of claim are not generally accepted by Brazilian courts as conditions precedent, unless it is demonstrated that the non-formalization of the claim has a “stoppel” meaning.

21. **What insurances are the parties required to hold? And how long for?**

Brazilian law imposes mandatory insurances to be contracted and maintained for construction-related projects, as follows: (i) civil liability for real estate contractors of urban zone constructions with respect to bodily injury and physical damage injuries and property damage, during all construction period; (ii) assets encumbered as guarantees of loans or financings granted by public financing institutions; (iii) guarantees of the real estate developer and builder, until construction is complete; (iv) guarantees of payment of the borrower related to construction, including real estate obligations; and (v) insurance against fire or total/partial destruction of buildings (Article 1,346 of BCC).

Besides that, the following non-compulsory insurances are usually required within the scope of construction projects: (i) engineering risks (“All Risks”); (ii) Third parties’ civil liability (“OCC/IM”); (iii) miscellaneous risks insurance regarding mobile and stationary equipment; (iv) bodily injury and physical damage and life coverage for builder’s employees; and (v) environmental risks.

Nevertheless, the parties may also agree on other insurance policies that serve the interests of both, especially in the context of highly complex infrastructure projects.

22. **How are construction and engineering disputes typically resolved in your**
jurisdiction (e.g. arbitration, litigation, adjudication)? What alternatives are available?

The Brazilian legal system offers a few kinds of dispute resolution procedures, and their use tend to vary according to the type of contract executed by the parties. Whilst disputes related to low budget and ordinary lump sum agreements, for example, tend to be taken to the state courts, more complex agreements, such as EPC and other FIDIC types, tend to be subject to arbitration.

Brazil also counts on mediation, but studies show that this sort of procedure has not yet taken off. On the other hand, and this is perhaps the most exciting news in this regard, is the visibility brought to Dispute Boards. The city of São Paulo passed the law 16,873/2018, which recognizes the use of Dispute Boards, in its purest essence, for administrative contracts. The new law of São Paulo has already echoed positively in the various academic and professional fora, which see in the tool an excellent remedy for the overwhelming planning deficiencies that plague contracts of the public administration, especially those involving civil works and infrastructure. One of the partners of our firm was the one responsible for drafting the first version of law 16,873/2018.

Along with the new Law, which is already being spread to other states and the federal union, many public employers have inserted Dispute Board clauses in their contracts. New case law has also raised the Dispute Boards to a safer stage, thus encouraging employers and contractors to make use of the method. It is still in its beginning, but the expectations are high.

In conclusion, construction and engineering disputes are typically resolved by state courts, arbitration, dispute boards and mediation. Brazil does not count on adjudication procedures such as those implemented in England.

23. **How supportive are the local courts of arbitration (domestic and international)? How long does it typically take to enforce an award?**

Brazil is among the leading countries in the use of arbitration, and both domestic and international arbitration chambers have played an important role in this successful story throughout the years. Brazil counts on very well reputed courts of arbitration that provide excellent administration services to tribunals and parties. The increase of arbitration procedures in Brazil has also brought the attention to renown international courts, such as ICC, which decided to incorporate a physical branch in the city of São Paulo.

24. **Are there any limitation periods for commencing disputes in your jurisdiction?**

The Brazilian Civil Code determines the statute of limitation related to disputes concerning contracts in general, their included construction and engineering contracts.
Despite the major understanding that the statute of limitation counts 10 years from the event that caused the right to claim, there is currently a controversy within the Brazilian Superior Tribunal of Justice (STJ), questioning if the statute of limitation should be of 3 or 10 years. The judges are still deliberating over the subject and no definitive decision has been issued so far.

In order to avoid the risk of such interpretation, we frequently recommend that the parties submit to the courts a preliminary request, with the sole purpose of interrupting the count down, until the parties can finally decide whether they shall carry on with the law suit or arbitration.

25. **What are the biggest challenges and opportunities facing the construction sector in your jurisdiction?**

Brazilian construction and infrastructure market seem to be starting a new cycle of growth after its true devastation in the last five years. Operation Car Wash was a real bomb that exploded in the hands of basically every construction leading company in Brazil. Such companies, controlled by Brazilian shareholders, had played a central role not only as contractors but also as investors and concession holders in the main projects in our country. Once they lost their capability of investment or being financed, due to the impact of the Car Wash Operation, many changes have occurred. Firstly, such companies returned to their roles of only contractors. Furthermore, their difficulties, along with the end of any collusion practice, opened space for the entrance of foreign groups, both as investors or as contractors. Foreign companies are being strongly incentive by the Brazilian government to take part in the different projects that are in our agenda of Public Auctions.

The Infrastructure agenda in Brazil is still very necessary and is a priority for the current government.

Brazil is therefore an arena opened for new groups to occupy the space left by their former leading companies. That poses many opportunities but also some challenges. One of the main challenges is to assure the new entrants with the legal certainty needed to operate in our market. Even though there have been some improvements on this matter there is still a long path to go. Therefore, knowing Brazilian legal complexity will be key for any company interested in doing construction projects in Brazil.

26. **What types of project are currently attracting the most investment in your jurisdiction (e.g. infrastructure, power, commercial property, offshore)?**

Brazil is still recovering from one of the largest recessions of its history and it is not clear if 2019 will be a year of strong economic growth. The first quarter of the year was not as strong as expected and the reform agenda of the recently elected government is slowly progressing.
The last two years were the ones with the smallest investment in infrastructure in Brazil, in the last decade. In 2018, public investment into infrastructure accounted for only 0.4% of the GDP, one of the lowest ratios in the world. The amount invested was not even the one necessary to offset the depreciation recorded for that year. The good news is that the country needs to catch up with its investment in infrastructure.

Transportation infrastructure continues to be the driver for the years to come. The Brazilian Association of Infrastructure and Basic Industries (Abid) reported the existence of 59 projects, totaling BRL111 Billion, in the pipeline of short-term bidding process. Those 59 projects are related exclusively to transportation. For instance, the airport bidding process resulted in the licensing of 12 airports and a revenue of BRL2.4 Billion to the federal government, in early 2019. Private port terminals are also receiving attention from investors and, as of 2018, more than 200 private port terminals were licensed to operate in the country. Finally, in a couple of years, government will perform bidding for the renewal of licenses of major highways and railroads, which license will terminate in 2021.

Renewable energy has been the one sector receiving more investment in the past years, in particular because of the stronger regulation of the sector and of new energy sources, i.e wind and solar photovoltaic.

Besides those traditional cash cows, the investors and Brazilian government (federal, state and municipal) are looking closely to the Public-Private Partnerships-PPP. For instance, the city of São Paulo plans to bid a Public Lighting PPP in the first half of 2019, which shall exceed BRL 5 Billion. Over 250 smaller projects of Public Lighting PPP’s were initiated by 2018. Brazil has over 5 thousand cities, jut to mention the opportunities in the public lighting sector. Also, recently elected governors are in discussion for the construction of housing, schools and prisons (social infrastructure).

All else constant, Brazil needs to invest at least 4.3% of its GDP for the next 10 years to manage current bottle necks affecting our infrastructure. In current figures, that investment exceeds BRL 1Trillion. Thus, there is plenty of opportunities to be explored.

27. **How do you envisage technology affecting the construction and engineering industry in your jurisdiction over the next five years?**

In the last decade or even decades, possibly because of the way the Brazilian construction market was divided by the Brazilian construction companies, the construction sector had fewer incentives to innovate and improve productivity and competitiveness. Besides, in general, not only in Brazil, the construction sector is more conservative. Nonetheless, Brazilian culture accepts very well new technologies. It is seen as a signal of evolution. Therefore, technology has already started to affect and will keep impacting on engineering and constructions industries.
Here are some cases in which we can foresee some transformation in Brazil:

- Digitalization will diminish papers exchanged among Parties; workflows will significantly increase not only to share official documents but also to get approvals with legal enforcement;
- Drones will help to monitor and measure the physical progress of the Projects;
- Errors and unproductivity will be easier to identify, monitor and charge due to digitalization;
- Experts will have facilitated access to Project data due to digitalization, hence disputes will be more accurate or even be prevented;
- Internet of Things (IoT) will improve productivity and safety on sites;
- Smart contracts will expedite simple and procedure contracts on procurement departments;
- Building Information Modelling will significantly improve risks analyses and planning of new Projects.