ETHICAL CONDUCT

CTG Brasil is committed to acting with ethics and integrity in all its activities. This is the basis on which the company has conducted its business and the employees are responsible for materializing this belief in the relationship they establish with all the publics that relate to the company.

To guide this performance, the company has a board dedicated to risk management and compliance issues, which reports directly to the CEO of CTG Brasil and with free access to ABM (Advisory Board Members, composed of representatives of CTG International), in order to ensure its independence in the recommendations and fronts it operates. CTG Brasil’s professionals have the Code of Ethics and Business Conduct, with guidelines and guidelines to identify – and know what steps to take – in situations that go against the purpose and corporate values or, even, the legislation. The leaders have the responsibility to know the document and ensure that their information is transmitted and understood by their teams.

The Compliance Program, in turn, concentrates investments, projects and initiatives to ensure compliance with the Code and Compliance Policies and provide tools so that deviations of conduct can be communicated by employees and external audiences. The structure of the Compliance Program allows the compliance culture to be worked in a structured manner, with the dissemination of corporate values, the reinforcement of knowledge through training and communications, risk assessments of internal processes, compliance due diligences in relation to suppliers, business partners, and the engagement of the value chain.
The ethics and integrity trainings cover 100% of the employees and are given both in face-to-face and online events. Among them is the Compliance Week, held every year with a special program of lectures, activities and communications on the subject.

Since 2018, CTG Brasil has an online platform to provide distance learning courses to the internal public, which guarantees the reach of the teams installed in different locations in Brazil. For new hires, the training courses are held in person, during the integration period, when the Code of Ethics and Business Conduct is presented and detailed, as well as the corporate guidelines for topics such as anti-corruption, anti-fraud, fair competition, ethical conduct and expected behavior of each new employee. Every year, 100% of employees are trained and formally renew the acceptance of the Code of Ethics and Conduct, in addition to other compliance certifications, such as Conflict of Interest and Annual Compliance Review (specific to leaders).

The company also has a compliance due diligence process for suppliers and business partners, as well as for M&A (Merger & Acquisition) operations. Such process aims at carrying out analyses, conducted prior to the hiring or purchase proposal, regarding the eventual situations and involvement of such entities and individuals with acts of corruption, fraud, money laundering and other crimes that may bring financial losses or to the reputation of CTG Brasil from the relationship established with such counterpart. In the relationship with government agents, all employees are advised on how to proceed and report activities, through the Interaction Program with the Public Power. Through this systematic approach, the assessment of risks related to corruption covers 100% of operations.
**Linha Ética (Ethics Line)**

Linha Ética (Ethics Line) is the tool made available by CTG Brasil, within the scope of the Compliance Program, to receive reports, doubts or denunciations of situations that violate the Code of Ethics and Business Conduct or the legislation itself. Such channel is managed by a partner (Safe Contact) in order to guarantee impartiality in the reception of each and every manifestation.

Employees – or any other stakeholder of the company – have access through an exclusive website (https://www.contatoseguro.com.br/ctgbr) or by telephone 0800 601 6888, at any day or time.

After reception and initial analysis, all reports are directed to CTG Brasil’s Compliance team and independently investigated. For the most sensitive cases, the Ethics and Compliance Committee, coordinated by the Risk and Compliance Director, has the role of discussing and deliberating collectively, in addition to providing executive support to the investigations. With this model, CTG Brasil guarantees the secrecy and confidentiality of the information provided, including the option for the author to choose to remain anonymous.

**Manifestations received through Linha Ética (Ethics Line)**

- 2017: 40
- 2018: 46
- 2019: 54

**Manifestations received in 2019 by status**

- Under review: 20
- Completed and partly justified: 11
- Completed and justified: 5
- Completed and unfounded: 5
- Inconclusive: 6
- Consultations/Doubts: 5

**Total**: 54
Value chain

In order for the commitment to ethics and integrity to permeate its entire value chain, CTG Brasil also makes available the Code of Ethics and Conduct for Suppliers. The document presents the guidelines that the company expects from its partners during the business relationship, in line with the corporate values.

Among the guidelines established by the Code is CTG Brasil's opposition to the adoption of degrading labor practices that are not in conformity with the legislation and the prohibition of establishing contracts with suppliers that use child labor or subject their employees to slave-like working conditions. The company includes contractual clauses that require respect for human rights and the adoption of good socio-environmental practices, as well as the clause that refers to compliance with applicable anti-corruption laws. In the context of the Compliance Program, there are also initiatives to train and inform third parties and contractors about the corporate values, as well as about legal issues and compliance with contractual clauses related to integrity and anti-corruption.

The company established contracts for the purchase of materials, services and electric power with about 1,600 companies in 2019, totaling expenditures of around BRL 3 billion. In hiring these partners, suppliers close to the power plants are prioritized whenever possible, contributing to the generation of income and employment in the direct regions of influence. The company also maintains permanent contracts with large companies and owners of the latest technology and equipment.

The largest volume of expenses is concentrated in partners responsible for maintenance activities of the hydropower plants equipment, which requires the selection of partners with high technical capacity and compliance with CTG Brasil safety standards. The suppliers contracted for these and other activities – such as surveillance, cleaning, transportation and others – have their performance evaluated. The monitoring is registered in digital systems, allowing the traceability of processes and the control of SLAs (service level agreement) established in the contracts. CTG Brasil's databases also allow the monitoring of third party management, enabling the identification of risks related to suppliers’ compliance with labor legislation.
The monitoring of risks that may interfere with CTG Brasil’s capacity to develop and generate value with its business is performed transversally, with the support of an area of Corporate Risk Management and Internal Controls that is based on internationally recognized methodologies for this management (ISO 31000 and COSO) in order to, in a structured manner, provide visibility and capacity to manage corporate risks (ERM or Enterprise Risk Management).

From this methodology, the areas are accessed in order to identify those responsible for the risks (risk owners), help them to identify the degree of risk and the probabilities of materialization, as well as actions that mitigate their occurrence. At the end, a matrix has been structured with the main risks of CTG Brasil in the Reputational, Financial, Strategic, Regulatory, Legal and Operational spheres, among others. Such matrix of risks is reviewed periodically or in face of specific needs.

In 2019, the company mapped its internal risks related to cyber security and defined action plans based on the points of improvement identified. The actions, which will be implemented throughout 2020, include the review of security policies, process improvements and the implementation of the SOC (Security Operation Center), in addition to more efficient monitoring and registration tools. In addition, good practices already adopted, such as periodic system access reviews, internal and external audits, and intrusion testing at least twice a year have been maintained. Another advance of the year was on the employees’ awareness front: the traditional lecture approach was replaced by a gamification model, which has generated greater engagement from the internal public.

Based on best practices and market methodologies, CTG Brasil prioritizes risks related to business and defines mitigation actions.
CTG Brasil monitors and manages the main financial risks that may affect the normal course of its activities. Part of its risks are supported by an insurance portfolio that takes into consideration the nature and degree of severity, in order to eliminate or mitigate possible financial losses. The main insurance coverages cover operating risks, general civil liability, environmental and executive risks.

Financial management is governed by its own policies aimed at preserving financial assets in the face of market volatility. In this way, the main macroeconomic and sectorial indexes that impact cash and debt management are monitored, which minimizes possible risks of loss arising from financial and banking operations.

The company actively monitors customers’ credit ratings through its own methodology, based on market information and statistical models, with a view to mitigating possible losses due to default.

Financial risks management is supported by its own policies, insurance coverage and customer credit rating
Hydrological risk

Hydrological risk is an intrinsic condition of the Brazilian power generation sector, based on hydropower plants with large reservoirs and, therefore, vulnerable to the seasonal rainfall regime in the regions where they operate. The minimization of this risk occurs through the performance of the Risk and Portfolio, Energy Planning and Operation areas, internal structures that evaluate future scenarios for hydropower availability and suggest protection strategies to the commercial areas.

In recent years, due to periods of unfavorable hydrology, increasingly prolonged and severe droughts, hydropower plants have generated below their physical guarantees. In addition, the import of electricity, the contracting of reserve power, delays in power transmission structuring projects, anticipation of physical guarantee of structuring projects, Generation Outside the Order of Economic Merit (GFOM) contributed to the displacement of the hydraulic plants participating in the Energy Reallocation Mechanism (ERM), which were exposed to non-hydrological risks, negatively impacting their generation capacity. This generation deficit occurs when the GSF (acronym for Generation Scaling Factor, which is the ratio between the total production of the ERM and its physical guarantee) is less than 1. This means that the generation of the hydropower plants belonging to the ERM is less than the sum of the physical guarantee of the system as a whole. To cope with this difference, the generators must resort to energy purchase to mitigate this exposure. Normally, these purchases are made in the short-term market with values established by the Settlement Price for Differences (PLD), calculated by a methodology of the Chamber of Electric Energy Commercialization (CCEE).

All CTG Brasil companies are exposed to the GSF, with different levels of protection and mitigation of this risk.

Through the Brazilian Association of Independent Energy Producers (Apine), Rio Paranapanema and other generators that operate in the ACL filed a lawsuit in 2015, with an injunction request, in face of Aneel, with the objective of purging from the GSF calculation all non hydrological risks.
The injunction benefiting Apine (and consequently Rio Paranapanema) lasted from 2015 to October 2018, when Aneel obtained from the Superior Court of Justice (STJ) the suspension of this injunction, preserving the GSF values withheld between July 2015 and February 2018. The decision has no impact on the financial statements of Rio Paranapanema, since these amounts had already been provisioned. Additionally, the decision determined that the impacts related to GSF were accounted for retroactively to February 2018, from when Rio Paranapanema started to support them in the liquidations carried out by the Chamber of Electric Energy Commercialization (CCEE).

Rio Verde, in turn, filed a lawsuit against Aneel, in which it obtained an injunction protecting it from 95% of the impact of the GSF. Rio Canoas adhered to the renegotiation of the hydrological risk provided in Law No. 13,203 of December 8, 2015, hiring the product SP90, being exposed in 10% of the hydrological risk in this modality. The portion of its energy contracted in the ACL is subject to the effects of the GSF.

The issue, however, is not solved. In the regulatory sphere, PL 3,975/2019 (already approved by the Chamber) presents a solution for the treatment of non-hydrological risks attributed to generators through compensation in extension of the concession term. The bill was approved by the Senate Economic Affairs Committee (CAE) and will now proceed to a vote in the Senate Plenary.
There are different operational risks that can impact the operation of hydropower plants and one of the most demanding preventive and control actions is those related to accidents with dams built for the formation of water reservoirs. Although the probability of a rupture of these structures is very low, the impact caused by such an occurrence would be significant, resulting in financial losses and may have serious consequences on communities.

Therefore, the issue of dam safety is considered strategic for CTG Brasil, conducted in a structured manner and in full compliance with the legal requirements established by the country’s regulatory agencies. The National Dam Safety Policy was established by Law 12,334/2010 and covers all types of dams – for accumulation of mining tailings and formation of water reservoirs and for supply and generation of energy. Aneel Resolution 696/2015 regulates the legislation specifically for the electricity sector.
CTG Brasil has a Dam Safety Plan (PSB) that covers 100% of its hydropower plants. Based on compliance with legislation and corporate policies, the PSB establishes several procedures and routines that must be adopted to mitigate risks and ensure the safety and operational efficiency of these enterprises.

Within the PSB, each dam has a monitoring system composed of several listening instruments installed inside the structures, which are routinely read and evaluated and make it possible to identify abnormal dam behavior. In addition, safety inspections of dams are carried out periodically and allow the identification of any abnormal situation that may occur in the dam.

In addition, all the power plants have an Emergency Action Plan (EAP), a formal document that establishes the actions to be taken in the event of an emergency at the dam. The EAP is preventive in nature and aims to ensure the safety of the undertaking and the protection of the populations located in the floodable areas, especially in the Autonomous Zone (ZAS).

This set of actions is structured within the Dam Safety Plan (PSB), which is the baseline for the management of dam safety processes.

CTG Brasil adopts the best dam safety practices and, as a consequence, has its enterprises classified as low risk and in full compliance with the Brazilian dam safety legislation.

In 2019, the first training for the internal public was held, with the participation of 440 employees. As of 2020, this qualification will be held annually, contemplating several emergency scenarios and covering different hierarchical levels. The training will also have an online platform, which is in the final stage of development.
CTG Brasil also has the Emergency Operation System (SOSEm), a set of norms and procedures for operation and maintenance, involving technical, organizational and administrative aspects, with the objective of ensuring the safety of the hydraulic operation of all reservoirs. The SOSEm defines the criteria for issuing alerts and warnings to city governments and other agencies representing the civilian population when the conditions of rivers and reservoirs are outside the safety standards. The system also includes disclosure meetings, which were held throughout the period.

CTG Brasil’s Dam Safety Plan (PSB)

**Human resources**
19 dedicated engineers and technicians

**Systemic resources**
Structure monitoring system with about 4,000 equipments
SISOP Dams → Data Analysis System

**Procedures**
Routine inspections (monthly)
Regular inspections (annual)
Special inspections (on demand)

**Emergency Action Plan (EAP)**
Internal and External EAP
Articulation with Civil Defense
Internal training
Relationship with communities
Notification and alert procedures

**Periodic review**
External team of experts
Stability check
State of conservation of the structures
Review of the hydrological series
Discharge capacity of spillways
Monitoring history
Opinion on the safety of structures

**Requirements**
Meets the National Dam Safety Policy (Law No. 12,334/2010)
In accordance with Aneel regulation (Resolution 696/2015)
Follows the internal policies of CTG Brasil
CTG Brasil seeks to adopt good corporate governance practices. In addition to around 100 policies that formalize the premises and management practices, the company has the Compliance Program and structured programs for due diligence in its supply chain (learn more on page 36). In all areas, mechanisms and procedures ensure that all relevant aspects are brought to the attention of non-statutory Directors and, when appropriate, the Executive Committee and the Advisory Board, the highest decision-making bodies for strategic decisions, in order to ensure decision-making that seeks the highest level of governance and ethics, while mitigating risks to the business, shareholders and to the employees and executives themselves.

The group of non-statutory Directors, formed by 23 professionals, is responsible for conducting activities in each area of activity and for multidisciplinary engagement in projects that demand a systemic and comprehensive view of CTG Brasil.

The Executive Committee, also known internally as EBM (Executive Board Members) and formed by the CEO and vice-presidents, is legally responsible for conducting business and meets periodically for collegiate deliberation and key issues. Its members, elected by CTG Brasil’s shareholders, supervise and monitor the performance of the Board.

The Advisory Board, or ABM, is formed by representatives of CTG International, which is a subsidiary of CTG Corporation. This body oversees the implementation of the strategy by the Executive Committee and the non-statutory group of Directors. Among its duties, the board monitors the directors’ actions; examines books, company documents and the Management, Executive Board and Financial Statements Report; approves the annual business plan, the annual budget or capital expenditure (Capex); and submits to the partners’ meeting of CTG Brasil a proposal to establish compensation or benefit plans for executives. All EBM and ABM meetings are managed through a system, which gathers minutes, minutes and decision-making acts of the instances.

CTG Brasil’s governance structure
The controlled companies have their own corporate governance structures. Rio Paranapanema is a publicly traded company with shares traded on B3, the São Paulo Stock Exchange. Among the good governance practices adopted, we highlight the presence of a member of the Board of Directors (and his/her alternate) elected by the employees, the external audit of the Financial Statements and transparent disclosure of its Management Report, and the public availability of the minutes of shareholders’ meetings and Board of Directors’ meetings. The Board of Directors of Rio Paranapanema currently relies on the advice of the Strategic Commercial Committee, with the main function of assisting the body with a commercial focus on general business orientation. The Fiscal Council, non-permanent and installed in 2019, has three effective members and their respective alternates.

Rio Paraná, Rio Canoas and Rio Verde are privately held and each has its own Board of Directors and Executive Board, in addition to the Fiscal Council, of a non–permanent nature, which may be installed by resolution of the Shareholders’ Meeting.

Knowing how to act in an emergency situation is a condition to ensure the proper flow of information and decision-making in an agile and assertive manner. In 2019, CTG Brasil raised the level of readiness to deal with this type of occurrence when designing its Crisis and Business Continuity Plan for all its units. This plan defines which actions should be taken in each crisis scenario, such as a serious accident. Thus, everyone knows who should be informed, within what timeframe and with what type of information, allowing the organized flow of information to manage each situation. In 2020, the training of the company’s executives in the plan will begin, for its effective implementation.