

# **Risk Governance Framework**



## Risk Governance Framework

Risk Governance Framework at Cemig is supported by robust governance, involving different instances such as business areas, Executive Board, the Risk Committee of the Board of Directors (CRI), and the Board of Directors. The figure below describes the Three Lines Model at Cemig:



Figure 1: Three Lines Model at Cemig.

Each of these levels plays a specific role, promoting effective management and ensuring that risks are handled transparently and aligned with international standards, such as the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and ABNT NBR ISO 31000 (external audit), and the concepts established in the Three Lines Model, developed by the IIA (The Institute of Internal Auditors).





Figure 2: External Audit Certificate (ABNT NBR ISO 31000) from CEMIG, CEMIG D, and CEMIG GT.

Identified risks are classified into three categories:

- Process risks: related to specific activities within operational processes.
- Macroprocess risks: with impacts extending to different areas of the Company.
- Top Risks: more severe risks, identified in heat maps and treated as a priority due to their strategic or financial relevance.



The management process is regulated by its Corporate Risk Management and Internal Controls Policy and coordinated by the Risk Management and Internal Controls Department, which supports Cemig's areas in applying specific methodologies. This area is supported by professionals designated as "focal points," who assist in identifying, analyzing, and monitoring risks and implementing action plans.

Risks are assessed based on their probability of occurrence and impact, considering dimensions such as financial, reputation, environmental, compliance, and continuity. The magnitude of the risk is measured by assessing the probability and the severity of the impact. For each identified risk, internal controls and action plans are developed, reviewed semiannually, while controls are tested periodically to ensure their effectiveness.

The process or framework to determine the risk appetite for identified risks and its stages aim to guide decision-making according to the risks the Company is willing to take, within the limits (risk appetite) established by Senior Management. This risk appetite is identified, defined, and calibrated every two years, observing the processes and how the Organization is prepared to accept the inherent risks at each of its levels. In 2024, Cemig established the prescription of risk appetite based on individual assessment of prioritized risks, thus generating a process of determining risk appetite based on three scenarios (conservative, moderate, and risky) and with parameters that allow monitoring compliance with the limits indicated by the Board of Directors through Key Risk Indicators (KRI). If the risk in question shows that there is some benefit to its exploitation, opportunities can be mapped and developed according to the Company's objectives and business plans, mainly regarding process efficiency.

In Cemig's Risk Matrix, in 2024, available in the 2024 Annual Sustainability Report, Risk Management item, we highlight in a synthetic and non-exhaustive way some of the main risks related to economic, social, environmental, and governance themes, validated by the Board of Directors, which may affect the Company's performance. We also describe the rationale for the probability and impact that these risks may bring to Cemig's business if they materialize. Mitigation actions related to these risks are also described in the table below. We also highlight two emerging risks, which have potential impact on the business in the medium and long term, whose causes may originate from external events.

We review our company's risk exposure on a regular basis. The Risk Matrix undergoes internal review twice a year. Risks and their treatments are continuously monitored, with action plans updated at least twice a year (semiannually), which constitutes a review of risk exposure on a regular basis. Controls are tested periodically, with frequency defined in their scope. We have also conducted an audit of the risk management process in 2024, according to [Cemig's 2024 Annual Report on Internal Audit Activities](#). Please see "Processos auditados em 2024", item "Riscos Corporativos" which means ("Audited process 2024" and "Corporate Risks").

To implement the risk culture in the company, we have strategies in place to promote an effective risk culture throughout the organization, such as:

a) Regular risk management education for all non-executive directors

Annually, administrators and board members undergo governance improvement training, covering

issues such as compliance with the content criteria of Law 13,303, strategic direction, risk management, compliance, and ESG.



## ARQUITETURA DO CURSO

A produção do curso se dará após a contratação e da realização da reunião de kickoff e terá o prazo de **02 (dois)** meses para ficar pronto para oferta.

O curso será composto por **05 (cinco)** módulos e a arquitetura do curso prevê para cada módulo:

### **01 (uma) hora de Videocast**

Uma jornalista entrevista o professor especialista no tema, a partir da ementa, num formato bastante difundido atualmente e gravado no estúdio da FGV.

### **02 (duas) horas de Indicação de materiais complementares**

O professor de cada módulo indicará objetos de aprendizagem para aprofundamento no tema, tais como artigos, podcasts, videoaulas, vídeos, hiperlinks, entre outros, a partir de uma curadoria de conhecimento. Para o caso de textos, a FGV considera 1h para cada 6 laudas de conteúdo.

### **01 (um) exercício objetivo de fixação**

Questão problematizadora com alternativas de respostas e feedback automatizado

## CONTEÚDO PROGRAMÁTICO

### CUMPRIMENTO DAS EXIGÊNCIAS DE CONTEÚDO DA LEI 13.303

- Legislação societária e de mercado de capitais;
- Divulgação de informações
- Controle interno e Gestão de Riscos
- Código de conduta e Integridade
- Lei nº 12.846, de 1º de agosto de 2013 (Lei Anticorrupção)
- Demais temas relacionados às atividades da empresa pública ou da sociedade de economia mista

### CONSELHO NA PRÁTICA

- Processo de Tomada de Decisão no Conselho de Administração
- Comunicação
- Perfis de Comportamento

### DIRECIONAMENTO ESTRATÉGICO

- O papel do conselho na discussão, aprovação e monitoramento da estratégia empresarial
- Ferramentas de acompanhamento da estratégia
- Compreensão do modelo de negócios
- Relacionamento com os órgãos do Sistema de Governança Corporativa

### RISCOS E COMPLIANCE

- O papel do conselho na identificação de riscos, definição de exposição e supervisão
- Ferramentas de monitoramento de riscos
- Papel dos órgãos de controle
- Como monitorar e o que monitorar
- Melhores práticas de Compliance

### ESG

- Visão geral, desafios e oportunidades
- Desafios complexos contemporâneos e o papel da governança e dos Conselhos de Administração
- Responsabilidades do Conselheiro
- Como os agentes da governança podem acelerar a agenda estratégica
- Exemplos de organizações que adotaram uma agenda ESG

Figure 3: Improvement in Governance for Administrators and Board Members of State-Owned Companies and Mixed-Capital Companies course syllabus print screen. Where it says RISCOS AND COMPLIANCE, please read RISKS AND COMPLIANCE. The topics covered for this discipline are translated below:

The role of the board in identifying risks, defining exposure and supervision

Risk monitoring tools

Role of control bodies

How to monitor and what to monitor

Compliance best practices

b) Focused training throughout the organization on risk management principles

Cemig offers a Corporate Risk Management Knowledge Path on its online courses platform, Univercemig, aimed at promoting a culture of Risk Management among all employees and providing progressive learning aligned with best market practices. The topics covered include Introduction to Corporate Risk Management, Corporate Risks in the CEMIG Context, and GRC: Themes Integrated into the 3-Line Model. In 2022 and 2023, the company also conducted two modules of the “Risk Management and Internal Controls Training” course, designed to foster a systemic and critical view of each employee's activities. Those courses have emphasized the importance of addressing issues and

critical situations that may impact the achievement of the company's strategic objectives, achieving a significant participation of Cemig's employees.



[Página inicial](#) [Painel](#) **Meus cursos**



TREINAMENTO EM PRIVACIDADE  
E PROTEÇÃO DE DADOS ...



TREINAMENTO SEGURANÇA DA  
INFORMAÇÃO



TRILHA DE APRENDIZAGEM  
RISCOS CORPORATIVOS

## Conteúdo Programático

### Módulo 1 — Introdução à Gestão de Riscos Corporativos

- Gestão de Riscos e Controles Internos I — UNIVERCEMIG (2h)
- ✱ Introdução à Gestão de Riscos — ENAP (40h)

### Módulo 2 — Riscos Corporativos no Contexto CEMIG

- Gestão de Riscos e Controles Internos II — UNIVERCEMIG (4h)
- 🕒 Gestão de Riscos em Processos — ANEEL (30h)

### Módulo 3 — GRC: Temas Integrados às 3 Linhas

- 🏢 Governança Corporativa no Brasil — FGV (9h)
- 🔍 Controle em 5 Dimensões — ENAP (30h)
- 💡 Compliance Anticorrupção em Estatais — ENAP (25h)
- 📄 Auditoria Baseada em Riscos — ENAP (20h)

## Módulo 4 — Temas Relevantes da 1ª Linha

- ⚡ Fundamentos do Setor Elétrico — ANEEL (40h)
- 🏞️ Segurança de Barragens — ENAP (40h)
- 👥 Governança de Gestão de Pessoas — ANEEL (20h)
- 📚 Gestão do Conhecimento — ENAP (20h)
- 🏢 Aspectos Comerciais do Setor Elétrico — FGV (12h)

## Módulo 5 — Conhecimento Multidisciplinar

- 📊 Power BI para Gestão — ENAP (25h)
- 🤖 Inteligência Artificial no Dia a Dia — ENAP (4h)
- 🌍 Diversidade e Direitos Humanos — USP
- 💬 Inteligência Emocional — ENAP (50h)
- 🎤 Oratória de Alta Performance — KULTIVI
- 🧠 Autoconhecimento e Motivação — ENAP (30h)

## Módulo 6 — Cursos Prioritários para o Time de Riscos

### ✚ Informação Importante:

Os cursos são recomendações da DCI, considerando que são aplicáveis aos empregados das gerências vinculadas à respectiva Diretoria, mas, o custeio é de total responsabilidade dos interessados.

- 📄 ISO 31000:2018 — Bureau Veritas (16h)
- 📄 COSO ERM — IIA (32h)
- 📄 COSO ICF — IIA (40h)
- 📄 Gestão de Crises ISO 22361:2023 — BSI (16h)
- 📄 Compliance e Proteção de Dados — PUCRS (10h)
- 📄 Gestão de Crises no Setor Público — ENAP (30h)



Emissão do Certificado da Trilha

Figure 4: Corporate Risk Management Knowledge Path on the online courses platform - Univercemig print screen

### Program Content Translation

Module 1 - Introduction to Corporate Risk Management

Module 2 - Corporate Risks in the CEMIG Context

Module 3 - GRC: Topics Integrated into the 3 Lines

Module 4 - Relevant Topics of the 1st Line

Module 5 - Multidisciplinary Knowledge

Module 6 - Priority Courses for the Risk Team

### c) Incorporation of risk criteria in the development of products and services

Regarding the incorporation of risk criteria in the development of products and services at Cemig, some examples are: aiming to minimize and adapt to the impacts of climate change on the Company, Cemig conducts scenario analysis studies related to the company's activities and implements controls and action plans to mitigate and minimize these impacts. We cite the prospecting and development of projects related to energy transition, the automation of three-phase reclosers, acquisition of emergency structures, and the implementation of the Climate Change Adaptation Plan.



Additionally, aiming to eliminate situations of electric shock risk in Cemig D's distribution networks, the macroproject Third Party Safety was defined. This program aims to make the necessary investments for the removal and/or distancing of networks, to eliminate accident risks by direct touch, indirect touch, or other risk situations for third parties in distribution networks. Last year, 567 installations were regularized, with an investment of R\$10.6 million.

Regarding the risk of not efficiently exploring innovative solutions, the company allocated investments for innovation, a technological partnership program with cloud projects, and the implementation of Inova Cemig Labs and Venture Capital (density in the ecosystem via startups), allowing solution allocation by different vehicles, meeting the possibilities of deadlines and partners adequately. Acting in this way, we anticipate meeting the needs of our customers.

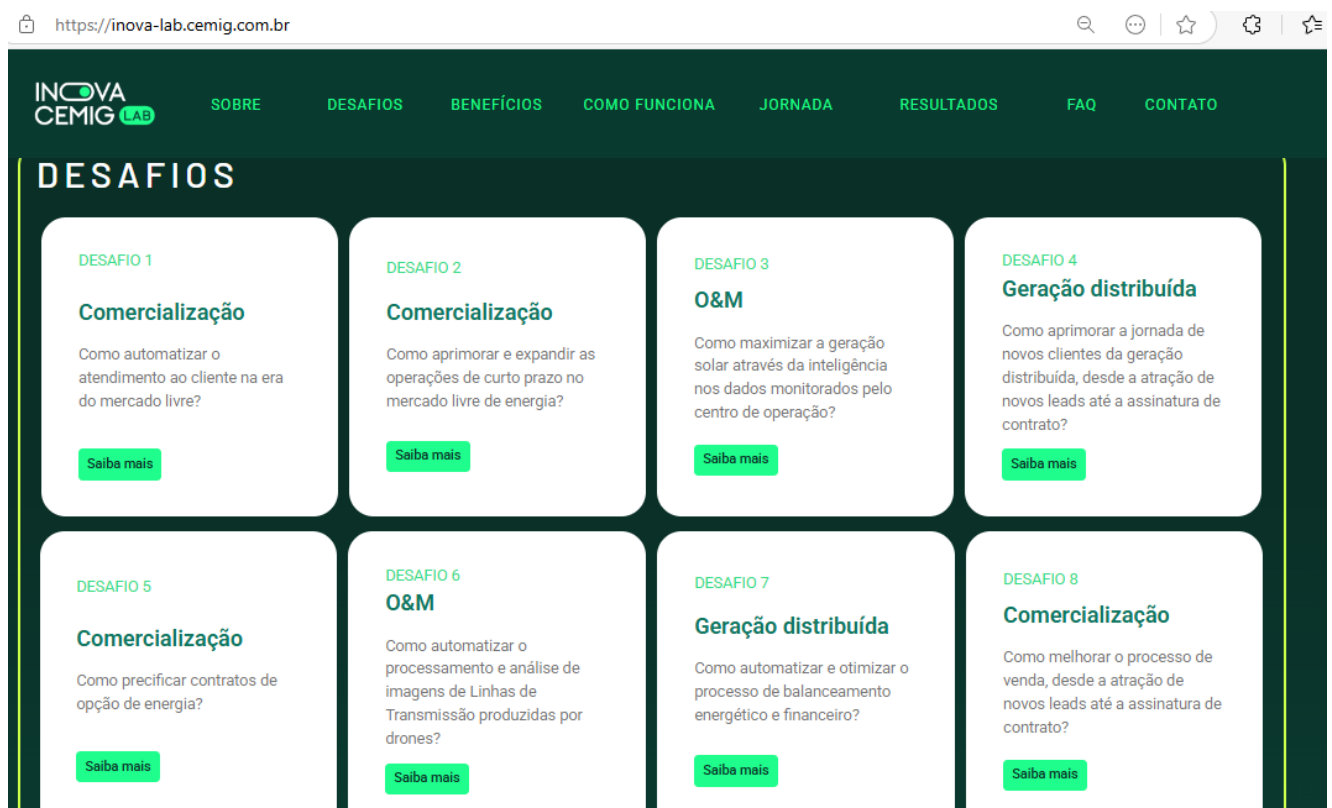


Figure 5: Inova Cemig Lab Website print screen describing the innovation challenges proposed to interested startups (website <https://inova-lab.cemig.com.br/>)

Challenge 1 - Marketing: How to automate customer service in the free market era

Challenge 2 - Marketing: How to improve and expand short-term operations in the free energy market

Challenge 3 - Operation and Maintenance: How to maximize solar generation through intelligence in the data monitored by the operations center?

Challenge 4 - Distributed Generation: How to improve the journey of new distributed generation customers, from attracting new leads to signing a contract?

Challenge 5 - Marketing: How to price energy option contracts?

Challenge 6 - Operation and Maintenance: How to automate the processing and analysis of Transmission Line images produced by drones?

Challenge 7 - Distributed Generation: How to automate and optimize the energy and financial balancing process?

Challenge 8 - Marketing: How to improve the sales process, from attracting new leads to signing a contract?

d) Financial incentives that incorporate risk management metrics

Performance Management includes the stages of performance evaluation and self-evaluation, structured feedback meetings, and the preparation and monitoring of development plans for each evaluated employee. These stages are subsequent and occur annually.

The following aspects are evaluated:

- Expected behaviors: sense of urgency to serve the customer, **risk management with ethics and compliance**, leadership with high performance, integration with co-responsibility, valuing the person and performance (valuing diversity and inclusion);
- Technical skills: knowledge and skills applied in performing duties, obtaining results and deliveries, considering their function and functional position;
- Agreed Deliveries: Deliveries made according to agreed requirements and goals (scope, deadline, and quality), considering the existence of necessary resources and conditions for the employee's function and functional position.

**Documento de avaliação para MARINA SOUZA LUCIO OLIVEIRA**

Gravar | Imprimir | Log de ação | Expandir | Comprimir

Preparação | Em Processamento | Concluída

Como você pretende continuar?

☒ Gravar parcialmente e sair

☐ Encerrar processo de avaliação total

[Continuar](#)

Descrição processo

Info

◆ Avaliações

➔ Conclusão do Processo de Avaliação

Dados administrativos

Avaliação Desempenho 2024 | Competências | Registros da Reunião de Feedback | Resultado das Avaliações | Plano de Desenvolvimento | Considerações Finais

Competências

	Total da Autoavaliação	Total da Avaliação (Avaliador)
Resultado da Avaliação de Desempenho		

Comportamentos Esperados

	Avaliação (Avaliador)	Autoavaliação
COMPORTAMENTOS ESPERADOS ▼ <a href="#">Comentário</a>	<div>Comentário: Avaliação (Avaliador): <a href="#">Ampliar campo de texto</a></div>	<div>Comentário: Autoavaliação: Nenhum texto inserido</div>
SENSE DE URGÊNCIA PARA SERVIR AO CLIENTE: Atende aos clientes internos ou externos com comprometimento, qualidade simplicidade, agilidade e urgência necessárias.		
GESTÃO DE RISCOS COM ÉTICA E CONFORMIDADE: Identifica e trata adequadamente os riscos inerentes a sua função, de forma responsável e ética, mediante comportamentos, práticas e decisões plenamente conformes com a legislação, diretrizes regulatórias, regras internas de saúde e segurança do trabalho, de segurança da informação, de gestão e Código de Conduta da Companhia.		

Figure 6: Employee Performance Evaluation print screen Where it says GESTÃO DE RISCOS COM ÉTICA E CONFORMIDADE, please read RISK MANAGEMENT WITH ETHICS AND COMPLIANCE. The topics covered for this part of the evaluation are translated below, the fields in front are for assigning a grade by the evaluator (superior of the employee being evaluated) and self-assessment:

RISK MANAGEMENT WITH ETHICS AND COMPLIANCE: Identifies and adequately addresses the risks inherent to their

function, responsibly and ethically, through behaviors, practices, and decisions fully compliant with legislation, regulatory guidelines, internal health and safety rules, information security, management, and the Company's Code of Conduct.

For this statement, the employee and their evaluator must classify whether the employee's behavior meets the requirements using the following: does not meet expectations, sometimes, meets expectations, often, almost always, always a reference.

Team performance evaluation occurs at the time of variable remuneration, with corporate indicators common to all employees and by team (based on common deliveries in managements), which are ranked by the best evaluation score and remunerated for good performance when they are in the top positions.

Risk management at Cemig is an integral and continuous process, based on solid governance and recognized international standards. Through detailed risk classification and rigorous internal controls implementation, the company ensures that risks are managed effectively and transparently. The systematic approach and periodic review of action plans ensure that Cemig is prepared to face challenges and seize opportunities, remaining aligned with its strategic objectives and promoting sustainability and efficiency in its operations. This robust risk governance framework is essential for the company's resilience and continuous success.