

Audit and Risk Committee

Extraordinary

Meeting No.

122

Date

October 19, 2023

2023

4

INFORMATIVE ISSUES

- a. Audit Report
- b. Risk Report
- c. Statutory Auditor's Report
- d. Related Party Operations Report, Q3 2023
- e. Compliance Report



Topic:

Type of Request:







Conclusions and/or Requests

Inform the Committee about GEB's risk management and and its subsidiaries regarding:

Risks Materialized during the period

Key Updates

Risk Monitoring

Early Warnings

Contingency Matrix



Reasons and/or arguments

It is the Committee's function to continuously monitor the risk management of GEB and its Subsidiaries in accordance with the risk appetite framework approved by the Board of Directors on December 20, 2021.

Cyber Risk Assessment

LOSS OF CONFIDENTIALITY, INTEGRITY OR AVAILABILITY OF THE COMPANY'S INFORMATION ASSETS AND/OR CYBERASSETS

Materialized Incidents:



				Impact		_
ĺ	Ver	y low	Low	Medium	High	Very high
		1	2	3	4	5 Cálidda
Very high	2		_			Grunornogia Bright TGI Comparing Grupo Energia Bogota
High	4				R06 3	E13 CoupoCongillogoti
Mediu	8				C13 15 3 R06	10 Flores Rupp
Low	2			T13		10
Very low	-					

Incident	Туре	Cause	Date	Impact	Governm ent
Grupo Energía Bogotá - Concur	Unauthoriz ed access	Compromise of privileged user credentials.	August 12, 2023	High operational status to non-critical systems	Closed
TGI - Impersonation of identity and brand.	External	External/Internal motivation	July 17, 2023	Reputational	Investigation

Internal Audit Findings Cybersecurity GEB



Weakness	Action Plan
Exposure of sensitive information in Deep and DarkWeb	Monitor the DarkWeb and Deep web with greater frequency. Project to implement protection of users with privileges
Exposed internal management technology resources	Exposure resource verification Resource exposure elimination or publication removal
Weak configurations	Strengthening of infrastructure assurance standards Project of internal and third-party external testing of the service operator
Vulnerabilities in the systems	Technological renewal project due to obsolescence

4.1

PANORAMA WORLD ELECTRICITY SAFETY CYBERSECURITY

Drivers

Political

Economic

Research on clean energy and technology



Opponents

- China
- Russia
- Iran
- India
- North Korea

Accelerators

Conflict

Energy Overruns

Modification of commercial flows



Factors

Transition to green energy

Investment in renewable and nuclear energy sources

Improvement in energy efficiency

Digitalization Increase Interconnected devices Smart networks

Internet of Things

Redefinition of energy security

Data Protection Policy
EU Cyber Defense Policy
Directive on Network and Information Security - NIS
National Agency for Digital Security and Space Affairs
CNO1502

Threat Landscape

Password attacks

34,740
Per minute

IoT Attacks

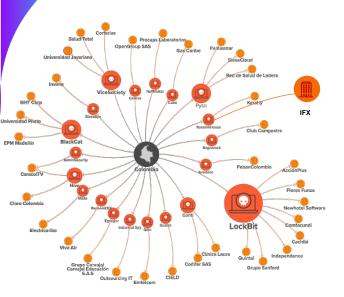
1,902
Per minute

Denial-of-Service Attacks 1,095
Per minute

Ransomware Attacks

1 Every 195 minutes 4.1

COLOMBIA CYBERSECURITY LANDSCAPE



Colombia is targeted by 12 global outlaw adversaries such as China, North Korea, Russia,

Cybercrime Trends

Cybersecurity infrastructure incidents	28,872
Identity theft cases	8,037
Increases in malware and ransomware attacks	612%











*3Q 2023 CSIRT Figures

79_{MNUTES}

It takes an opponent on average to compromise the first device in an organization

7 MNUTOS

is the record in which an organization has committed according to the intelligence teams of CS



of interactive intrusions have a commitment of identity

Technological Obsolescence

Credentials Commitment

Exploitation of vulnerabilities

4.1 STRATEGIC CYBERSECURITY OBJECTIVE OF GEB AND SUBSIDIARIES

Facilitate the transformation of the business and the adoption of new technologies by establishing trust and cyber resilience in the group's services





Regulatory changes unfavorable to the company's interests

Amendment of existing regulations (laws, decrees, resolutions, circulars, rulings, doctrinal changes) that negatively impact GEB's interests.

CAUSES

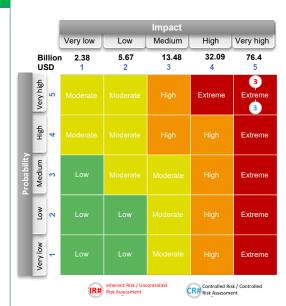
- Definition of public policies that may negatively affect the interests of Grupo Energía Bogotá
- Legislative proposals that modify the framework for the provision of public electricity and natural gas services
- Modification of the methodologies compensating regulated activities in which GEB participates
- interventions Temporary or amendments to market conditions or compensation methodologies
- Government proposals regulatory issues that negatively impact the interests of Grupo Energía Bogotá
- Management of other stakeholders and guilds before the government that negatively affect the interests of Grupo Energía Bogotá

CONSEQUENCES

- Impact on asset value exceeding 20%
- Decrease in expected revenue and impact on cash flow
- Impact on the principle of financial sufficiency
- generated Costs regulation that are not remunerated
- Potential and existing market loss
- Business growth constraints

CONTROLS

- Recurring monitoring of government entities with jurisdiction over the energy sector (executive and legislative) C1 C2 C3 C4 C5
- Strategic regulatory management that allows preserving the company's value, either directly or through proactive participation in associations C1 C2 C3 C4 C5
- Definition and implementation of government engagement strategies C1 C2 C3 C4 C5
- 4. Proactive regulatory management, anticipate government measures with proposals favorable for the regulated sectors C1 C2 C3 C4 C5
- Assessment of impact scenarios from potential short-term regulatory changes and implementation of mitigation measures C1 C2 C3 C4 C5



Extreme Risk Level

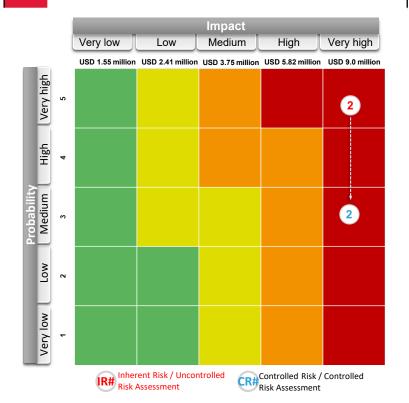




Probability and impact criteria for each evaluated strategic risk

Strategic Risks 2023

NON-CONTINUITY OF CRITICAL BUSINESS FUNCTIONS



Probability Criteria: Very High > 90% due to:

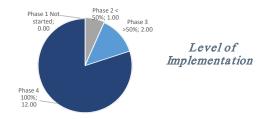
- Extension and exposure of the transport infrastructure.
- Cataloged events as black swans such as extreme weather conditions, mass movements in recurring areas, among others.
- Recurrence: In 2023, there were 9 emergencies with energy not supplied.

Impact Criteria: Economic and Operational. Scenario assessment:

- Ownership damage caused by fire, explosion or terrorism affecting 3 compression units for ~USD 54.5 million covered by the TRDM policy which does not represent a loss for Transportadora de Gas Internacional S.A. E.S.P. (Transferable via policy).
- Lost Profit for 7 hours to restore service considering the operational maneuver: ~ USD 1.2 million

Source: Maximum Loss Report from Néstor Mora & Asoc. Consultores de riesgos S.AS. The deductible amount for TRDM is USD 100,000

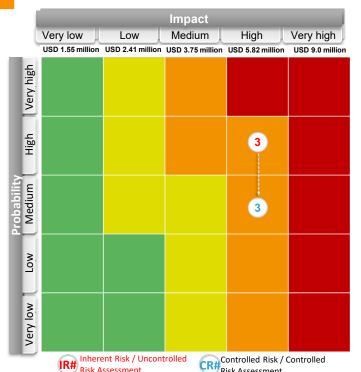




Probability and impact criteria for each evaluated strategic risk



VULNERABILITIES TO CYBER ATTACKS THAT COMPROMISE THE SAFETY OF INFORMATION AND CYBERSECURITY OF OPERATIONS



Probability Criteria: High between 61% - 90% due to:

According to a IT security audit, we found the following statistics:

- 880 critical vulnerabilities affecting IT assets (as of July/23 have already been addressed).
- +1 case using corporate accesses from personal devices, committed by hostile actors.
- Implementation of controls for TO
- In Colombia, several companies and entities have been affected by this phenomenon over the past two years, including Grupo Nutresa, EPM, Audifarma, Sanitas, Invima, and even the National Administrative Department of Statistics (DANE).

Impact Criteria: Economic and Operational. Scenario assessment by:

• Quantification of Ransomware event infiltrating the corporate network when enabling internet access on a SCADA WorkStation (Supervisory Control and Data). Loss of operational control and a potential ransom at the hands of cybercriminals exceeding USD 5.82M*.



Reference value in literature for ransom payment Colonial Pipeline May 2021



























For the restricted use of GRUPO ENERGÍA BOGOTÁ S.A. ESP. and its subsidiaries All rights reserved. No part of this presentation may be reproduced or used in any form or by any means without the express permission of GRUPO ENERGÍA BOGOTÁ S.A ESP. or its subsidiaries as owners of the information.