

ENVIRONMENTAL PERFORMANCE INDICATORS 2025

ENERGY TRANSMISSION COMPANY INDICATORS

	Performance data	Unit	2022	2023	2024	2025	GRI indicator
Greenhouse gas emissions GHG	Scope 1 Emissions	Ton CO2eq	29,407.00	18,752.00	18,796.00	18,784.0	305-1
	SF6 emissions	kg	1,060	534	540	515.0	305-1
	Scope 2 Emissions (Location Based)	Ton CO2eq	8,744.00	10,691.00	11,320.64	9,094.0	305-2
	Scope 2 Emissions (Market Based)	Ton CO2eq	8,744.00	5,935.00	5,396.00	2,955.0	305-2
	Scope 3 Emissions	Ton CO2eq	434048.28	348806	509082	979,856.0	305-3
Water consumption	Municipal water supply	Mio.m3	0.213	0.212	0.209	0.214	303-3
	Fresh surface water	Mio.m3	0.005	0.016	0.043	0.026	303-3
	Fresh ground water	Mio.m3	0.081	0.056	0.047	0.056	303-3
	Total net water consumption	Mio.m3	0.298	0.284	0.298	0.295	303-5
	Water consumption in areas with water stress	Mio.m3	0.189	0.153	0.049	0.034	GRI 303-1, 303-2, 303-3, 303-5
Energy consumption	Non-renewable fuels purchased and consumed	MWh	16,008.55	13,013.94	14,744.50	12,870.31	302-1
	Non-renewable electricity purchased	MWh	25,908.79	14,257.26	20,581.87	22,874.83	302-1
	Renewable energy purchased	MWh	67,519.91	66,974.59	62,929.76	61,962.87	302-1
	Renewable fuels purchased and consumed	MWh	5,032.35	5,574.66	5,190.20	4,010.27	302-1
	Total non-renewable energy consumption	MWh	41,917.34	27,271.20	35,326.37	35,745.14	302-1
	Total renewable energy consumption	MWh	72,552.26	72,549.25	68,119.96	65,973.14	302-1
Waste & Hazardous waste	Total waste generation	Ton	106,211.57	84,682.06	87,093.30	153,665.87	306-3
	Total used/recycled/sold waste	Ton	40,073.72	35,189.19	66,796.33	125,183.12	306-4
	Total waste taken to final disposal	Ton	66,137.86	49,492.87	20,296.96	31,624.47	306-5
	Waste landfilled	Ton	66,128.16	49,492.87	20,296.96	31,624.47	306-5
	Waste incinerated with energy recovery	Ton	0.00	0.00	0.00	0.00	306-6
	Waste incinerated without energy recovery	Ton	0.00	0.00	0.00	0.00	306-6
	Waste otherwise disposed (security cell)	Ton	9.70	0.00	0.00	0.00	306-6
	Total hazardous waste generation	Ton	307.92	274.23	998.78	209.71	306-3
	Hazardous waste recycled/reused	Ton	186.44	109.01	585.41	145.90	306-4
	Hazardous waste taken to final disposal	Ton	121.48	165.22	413.38	63.81	306-5
	Hazardous waste landfilled	Ton	0.15	0.46	73.49	2.90	306-5
	Hazardous waste incinerated with energy recovery	Ton	0.0	0.0	0.0	0.0	306-6
	Hazardous waste incinerated without energy recovery	Ton	2.88	8.85	213.53	2.45	306-6
	Hazardous waste otherwise disposed (security cell)	Ton	118.45	155.92	126.36	58.46	306-6

Information verified by ICONTEC as an independent third party; see: 

For the reporting of these emissions, the methodologies proposed by WRI and WBCSD in the GHG protocol (Corporate Accounting and Reporting Standard) were adopted for the calculation and reporting of ISA's greenhouse gas emissions. In addition, NTC-ISO 14064-1 was used

ISA and its companies are guided by their Corporate Environmental Policy, promoting responsible management of the use of natural resources, their circularity, impacts and risks mitigation, to ensure that processes are aligned with the pursuit of sustainable development. ISA established environmental standards, objectives, goals and requirements, focused on the life cycle of the asset, allowing it to act preventively and anticipate environmental risk management.

The ISA2040 strategy proposes concrete initiatives to reduce environmental impacts, inspired by the energy transition. The new materiality analyses conducted by the ISA Group in 2025 identified, among others, the management of environmental impacts associated with activities, energy transition and climate change as relevant for the achievement of its strategy and, therefore, this is assessed both internally and externally. To this end, the company manages the main environmental impacts generated during the life cycle of the asset and develops programs that implement best practices to mitigate them.

These goals were also included in the variable compensation system for employees as an incentive for continuous improvement around ISA's eco-efficiency and circularity processes.



Energy ISA Roads Chile
2025 Service Area
Solar Panels

ISA, as a signatory since 2005 of the United Nations Global Compact initiative, is committed to promoting practices to improve and contribute to sustainable development goals, as well as to maintain a preventive approach that contributes to the environment. To be consistent with these principles, ISA and its companies develop actions for climate change mitigation and adaptation in three areas:

- Climate change management: mitigation and adaptation.
- Eco-efficiency and circular economy: energy, water, waste.

Omissions in the report:

Water storage: this GRI indicator is omitted since ISA's activities do not represent a significant impact on water resources and the volume of water stored is not significant for ISA's operations.

Consumption and emissions during the construction phase of projects include the Scope 3 categories mentioned in the chapter on GHG emissions.

MITIGATION - EMISSIONS:

Emissions measurements were made through the Greenhouse Gas Inventory, according to the methodology of the World Resources Institute (WRI) of the GHG Protocol and the ISO 14061-1 standard, identifying the Company’s main sources of emissions, both direct and indirect. Reported emissions include Scope 1, 2 and 3.

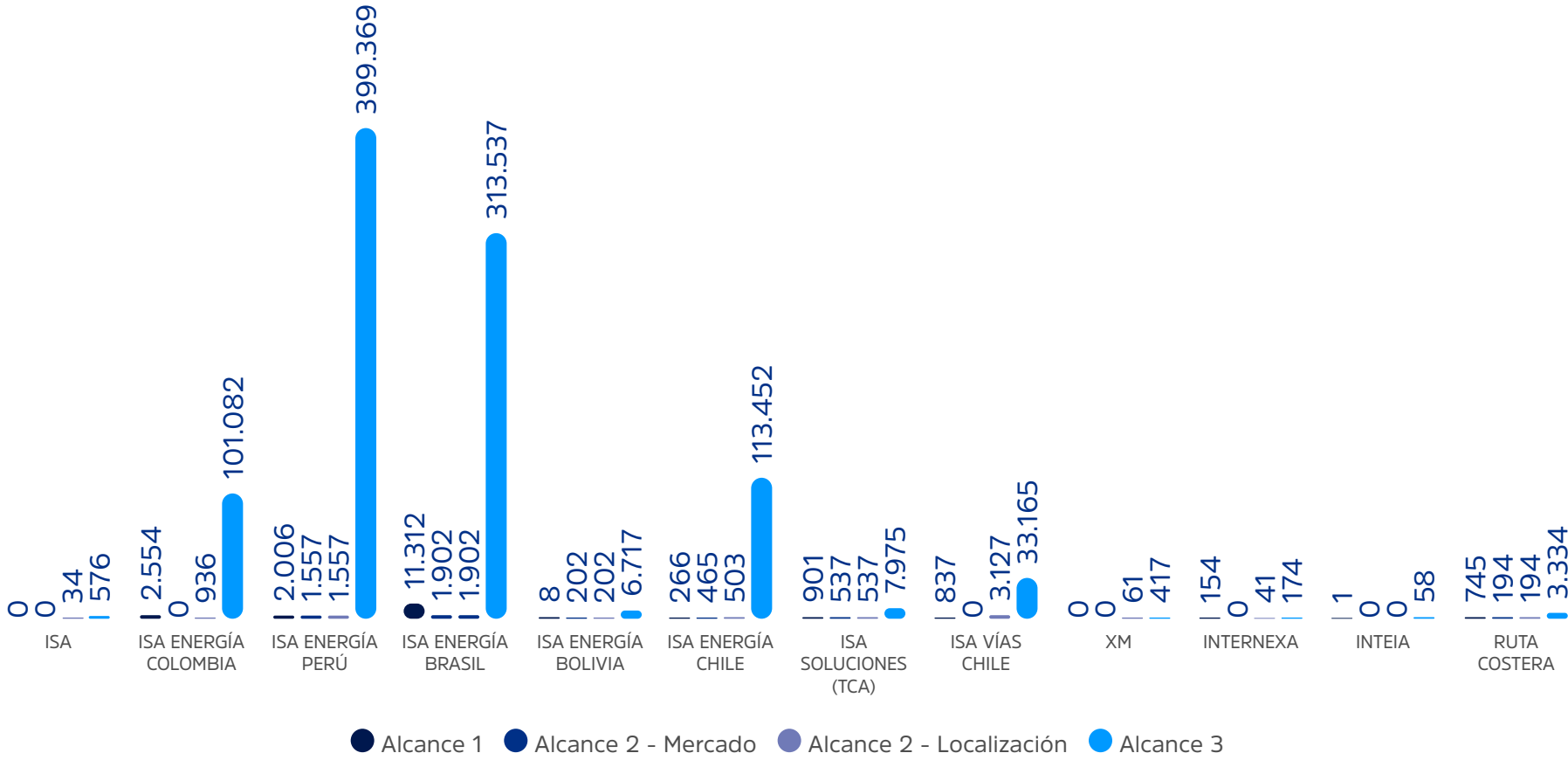
GREENHOUSE GAS -GHG

ISA 2025 GHG Inventory (tCO₂e)

Scope	Scope 1	Scope 2 - market based	Scope 2 - location based	Scope 3
ISA	0	0	34	576
ISA ENERGIA CO-LOMBIA	2,554	0	936	101,082
ISA ENERGIA PERU	2,006	1,557	1,557	399,369
ISA ENERGÍA IN BRAZIL	11,312	0	1,902	313,537
ISA ENERGIA BOLIVIA	8	202	202	6,717
ISA ENERGIA CHILE	266	465	503	113,452
ISA SOLUCIONES (TCA)	901	537	537	7,975
ISA VIAS CHILE	837	0	3,127	33,165
XM	0	0	61	417
INTERNEXA	154	0	41	174
INTEIA	1	0	0	58
RUTA COSTERA	745	194	194	3,334
TOTAL	18,784	2,955	9,094	979,856



Energy ISA Roads Chile 2025 Renewable Energy





Energy ISA Energy
Peru 2022 Efficient
Energy Use

ISA's climate roadmap considers both mitigation (emissions reduction) and adaptation of its businesses through the modernization of electricity infrastructure, technological innovation and development of new capabilities for a resilient and reliable "Grid of the Future".

This commitment is in addition to the **carbon neutral certification** that the company has held since 2021, renewed in 2023.

Through its **Conexión Jaguar Program**, the company will be able to offset residual emissions and **mobilize efforts beyond the value chain**, contributing to climate adaptation in the countries where ISA has operations.

The strategy sets staged targets: **reduce 60% of emissions by 2040 as part of its Strategy 2040 "Energy that brings the transition to life"**, and **achieve 90% reduction by 2050 against the 2022 base year**, neutralizing remaining emissions, which aligns ISA's pathway with the global commitments of the Paris Agreement and the goal of limiting global warming to 1.5°C.

SCOPE 1

ISA has a climate strategy aligned with joint priorities and actions of governments, society

and companies, based on a consolidated practice of measuring, reducing and offsetting Greenhouse Gases (GHG) produced by the operation of ISA's businesses.

ISA and its companies identified that in terms of their direct GHG emissions (Scope 1), more than 67% corresponds to leaks of sulfur hexafluoride, or SF6, which is installed in encapsulated substations and high voltage switchgear.

The Global Warming Potential (GWP) of this gas is 24,300 times higher than that of CO2, which constitutes a significant contribution to global warming per unit emitted.

The ISA ENERGIA BRASIL subsidiary is the group's largest power transmission company and has a high percentage of high-voltage gas insulated electrical substations (GIS) that are more than 20 years old, in addition to requiring a larger amount of SF6, they also allow a much higher percentage of leakage, given the technology available at the time of acquisition and installation.

Until 2020, the Group's consolidated value achieved the corporate target of keeping the leakage level below 0.5% of the total SF6 installed, as indicated by the IEC 62272-203 standard, which serves as a reference: The result for

2020 was 0.428% and, that same year, ISA set a goal for 2030 to exceed the requirements of the standard, reducing the target by 15% and moving from 0.5% to 0.425% of the total SF6 installed. In 2025, the consolidated leakage rate was 0.104%.

The emissions reported as total Scope 1 emissions include ISA, ISA ENERGIA COLOMBIA, ISA ENERGIA PERU, ISA ENERGIA BRASIL, ISA ENERGIA CHILE, ISA ENERGIA BOLIVIA, ISA SOLUCIONES TRANSELCA, ISA VIAS CHILE, XM, INTERNEXA, INTEIA, and RUTA COSTERA. Emissions in 2025 totaled 18,784 tCO2e, indicating that the target was met in line with the Net Zero pathway for that year (26,571 tCO2e).

To reduce direct GHG emissions, ISA continues with preventive maintenance of high voltage circuit breakers, replacement of high voltage circuit breakers at the end of their useful life, comprehensive training plan and awareness programs aimed at maintenance operators to prevent leaks in manual processes, the acquisition of SF6 gas detectors with state-of-the-art technology to detect and monitor leaks in real time, the recovery and reuse of SF6 gas in good physical-chemical conditions, the improvement plan established in 2020 with respect to SF6 inventory, and the management and correct final disposal through certified companies.

SCOPE 2

The second individual source of GHG emissions is associated with energy consumption (Scope 2).

The emissions reported as total Scope 2 emissions include ISA, ISA ENERGIA COLOMBIA, ISA ENERGIA PERU, ISA ENERGIA BRASIL, ISA ENERGIA CHILE, ISA ENERGIA BOLIVIA, ISA SOLUCIONES TRANSELCA, ISA VIAS CHILE, XM, INTERNEXA, INTEIA, and RUTA COSTERA. Emissions in 2025 totaled 9,094 tCO2e under the location-based method and 2,955 tCO2e under the market method, indicating compliance with the target in line with the Net Zero pathway for that year (7,901 tCO2e).

In order to continue advancing along the path to improve performance in Scope 2 emissions, the following initiatives are highlighted:

- Purchase of certified renewable energy (i-RECs) from ISA ENERGIA BRASIL, ISA ENERGIA COLOMBIA, ISA VIAS CHILE, and ISA ENERGIA CHILE.
- Microgrids of solar panels in substations and administrative headquarters.
- Solar energy projects in road business unit.
- Changes of lighting to LED systems in administrative headquarters.

See the chapter on energy management

SCOPE 3

The emissions reported as total Scope 2 emissions include ISA, ISA ENERGIA COLOMBIA, ISA ENERGIA PERU, ISA ENERGIA BRASIL, ISA ENERGIA CHILE, ISA ENERGIA BOLIVIA, ISA SOLUCIONES TRANSELCA, ISA VIAS CHILE, XM, INTERNE-

XA, INTEIA, and RUTA COSTERA. Emissions in 2025 totaled 979,856 tCO2e.

The following are the Scope 3 categories currently measured by ISA companies

Scope 3 emissions (2025)	tCO2e
C1: Purchased goods and services (upstream)	61,150
C2: Capital goods	112,499
C3: Fuel and energy activities (not included in Scopes 1 and 2)	762,540
C4: Waste from operations (composting, incineration)	5,867
C5: Business trips	8,904
C6: Employee commuting	4,455
C7: Upstream transportation and distribution	7,999
C8: Upstream leased assets	0
C9: Downstream transportation and distribution	16,441
C10: Processing of products sold (downstream)	0
C11: Use of products sold	0
C12: End-of-use treatment of products sold	0
C13: Downstream leased assets	0
C14: Franchises	0
C15: Investments	0
TOTAL	979,856



Waste ISA Energy Peru
2022 Waste Segregation
and Recycling

CIRCULAR ECONOMY AND ECO-EFFICIENCY:

ISA adopted a circular economy model to meet current environmental and social expectations, in addition to ensuring corporate sustainability.

The purpose of the model is to support the corporate strategy, promoting innovation and collaboration for an energy transition that makes it possible to keep assets in use, reduce waste and emissions, and regenerate nature, taking advantage of business opportunities and contributing positively to the environment and society.

The model supports the fulfillment of the following strategic objectives (in green):

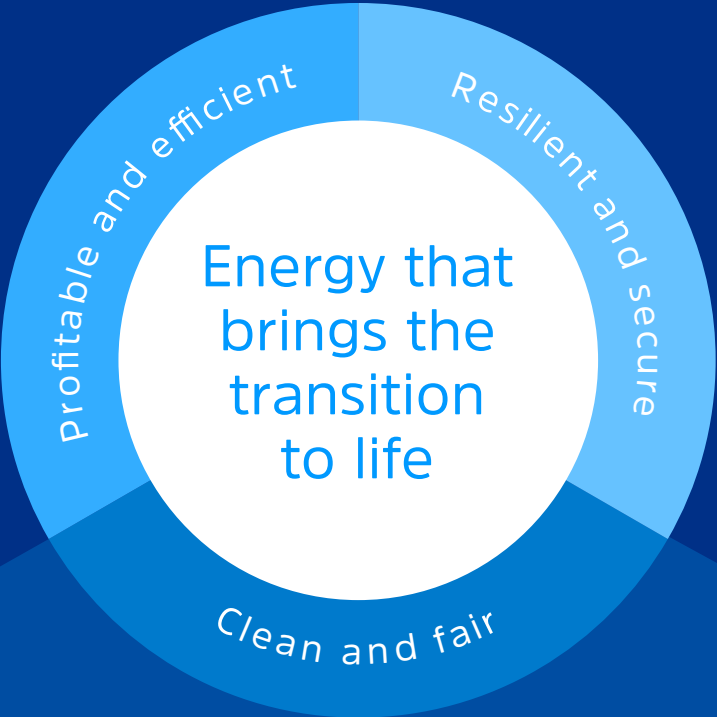
Strategic objectives to 2040

More than double the 2024 EBITDA (~ COP 20 trillion¹)

Increase the **company's market** value²

Profitably invest **USD 28 – 33** billion in **infrastructure** that drives decarbonization³

Achieve a 2x return on **investment in innovation, digitalization and technology**



Meet **100% of service levels** with **resilient, flexible and secure infrastructure**, preventing the materialization of **critical risks**

Mobilize the **transformation of the supply chain** to accelerate growth and **efficiency**

Ensure **the development of distinctive capabilities and organizational alignment**

Protect **people's life and well-being** through a safe culture and practices

Double the return to society from **social investment**

Contribute **positively to nature** and achieve the path to **Net Zero**⁴

Develop **8 GW of storage infrastructure** and **new energy solutions**

Increase 2024 transmission infrastructure capacity by 1.5x (~65,000 circuit GW-km)

1) EBITDA IFRS; figures in current COP; equivalent to USD 2.8 billion in constant 2024 USD. 2) Measured as the annual variation of the average target price of market analysts covering the ISA stock, adjusted for dividends of the period. 3) Current USD; includes CapEx committed as of the close of Dec/24 + CapEx from new businesses. 4) 2022 baseline; the target corresponds to Scope 1 and 2, excludes technical losses.

The circular economy model of ISA and its companies encompasses the life cycle of ISA's business units:

Circular economy model of ISA and its companies enabler of the ISA 2040 strategy

Aspiration: in support of ISA's corporate strategy, to drive innovation and collaboration to achieve an energy transition that keeps **assets in use, reduces waste and regenerates nature**, seizing business opportunities and contributing positively to the environment and society.

Pillars

Circularity in business: entails maximizing current revenue or generating new revenue through the creation or adaptation of products and services under a circular approach.

Circularity in procurement: entails integrating circular economy principles into the acquisition of resources and services, enabling circularity in business and ensuring circularity in operations.

Circularity in operations: entails implementing circular actions across all stages of the life cycle of ISA's assets, optimizing internal processes to improve efficiency and reduce resource consumption.

Enablers

Governance: establishment of internal policies and practices that ensure transparency, accountability and efficiency in decision-making, driving circularity throughout the organization.

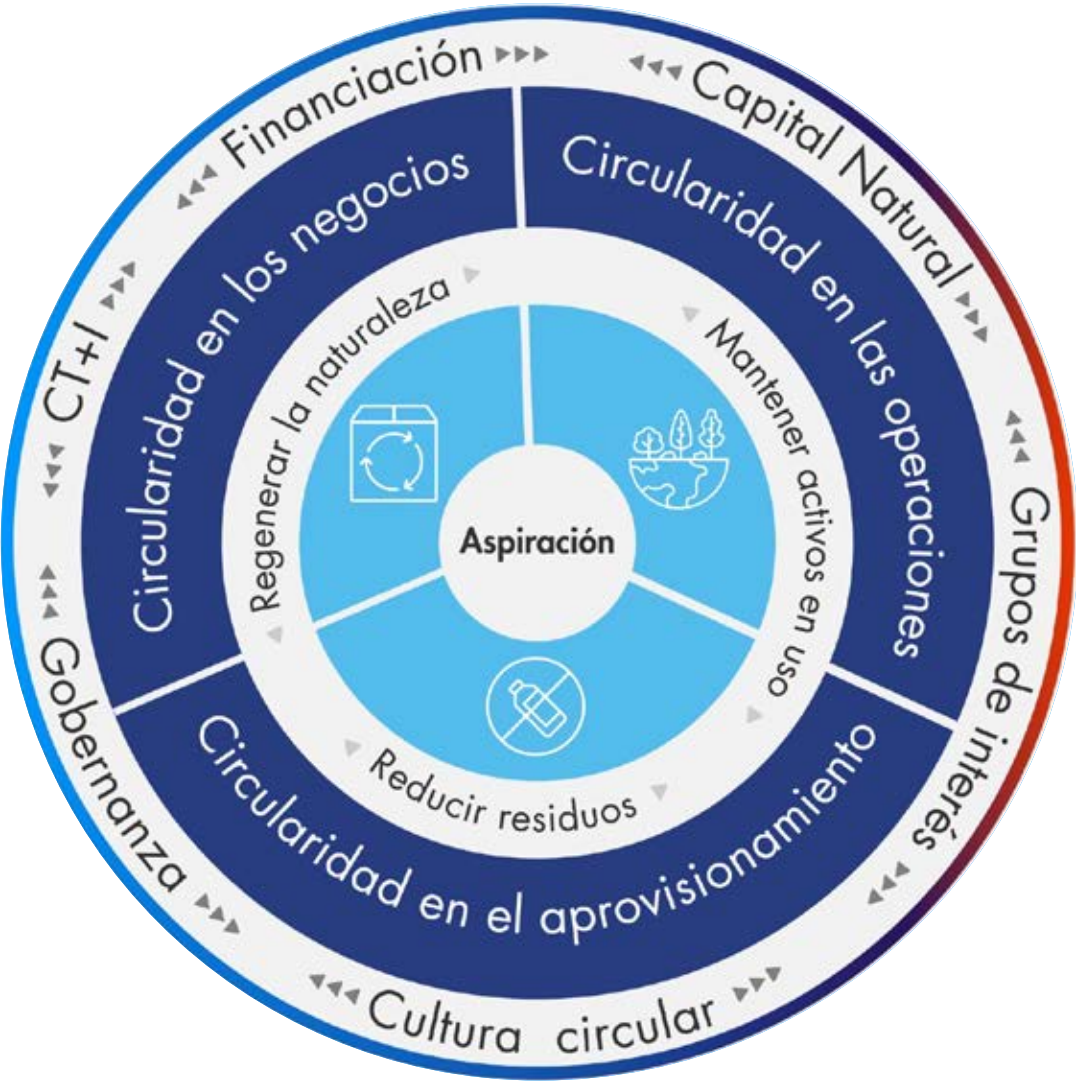
Science, technology and innovation (CT+i): development and adoption of innovative technologies and processes that improve ISA's efficiency and operations.

Stakeholders: actively collaborating and engaging with all relevant actors, internal and external, to promote circular practices and strengthen the implementation of the circular economy at ISA.

Financing: access to financial resources to invest in projects and technologies that drive the circular economy.

Circular culture: promotion of an organizational culture that values and practices the principles of the circular economy at all levels of the company.

Natural capital: Recognition and valuation of natural resources as essential assets, promoting their conservation, regeneration and sustainable use across all of ISA's activities, and ensuring their availability for future generations.



The model has goals established by axis for different time periods:

Circular economy model of ISA and its companies

Circularity targets in operations

Pillars

Circularity in operations: entails implementing circular actions across all stages of the life cycle of ISA's assets, optimizing internal processes to improve efficiency and reduce resource consumption.

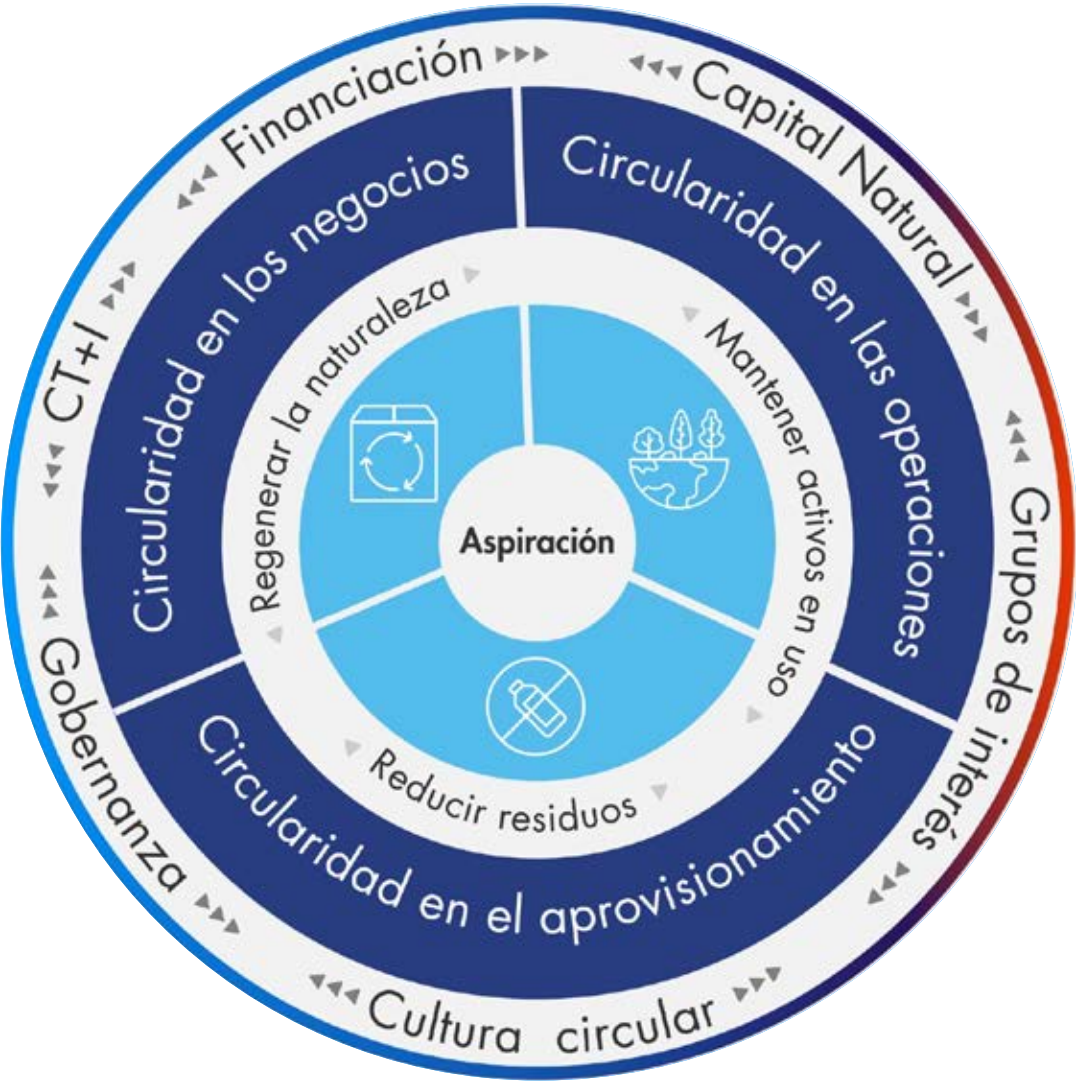
TARGETS

Short term (2025-2027):

Energy transmission:
Definition of the SF6 reuse and regeneration target (2026) - Directive 79.

Long term 2040:

Transmission and roads:
60% reduction in the consumption of water, (non-renewable) energy, and waste sent to final disposal.



Circular economy model of ISA and its companies

Circularity targets in business

Pillars

Circularity in business: entails maximizing current revenue or generating new revenue through the creation or adaptation of products and services under a circular approach.

TARGETS

Material reduction and loop closing:

Long term 2040:

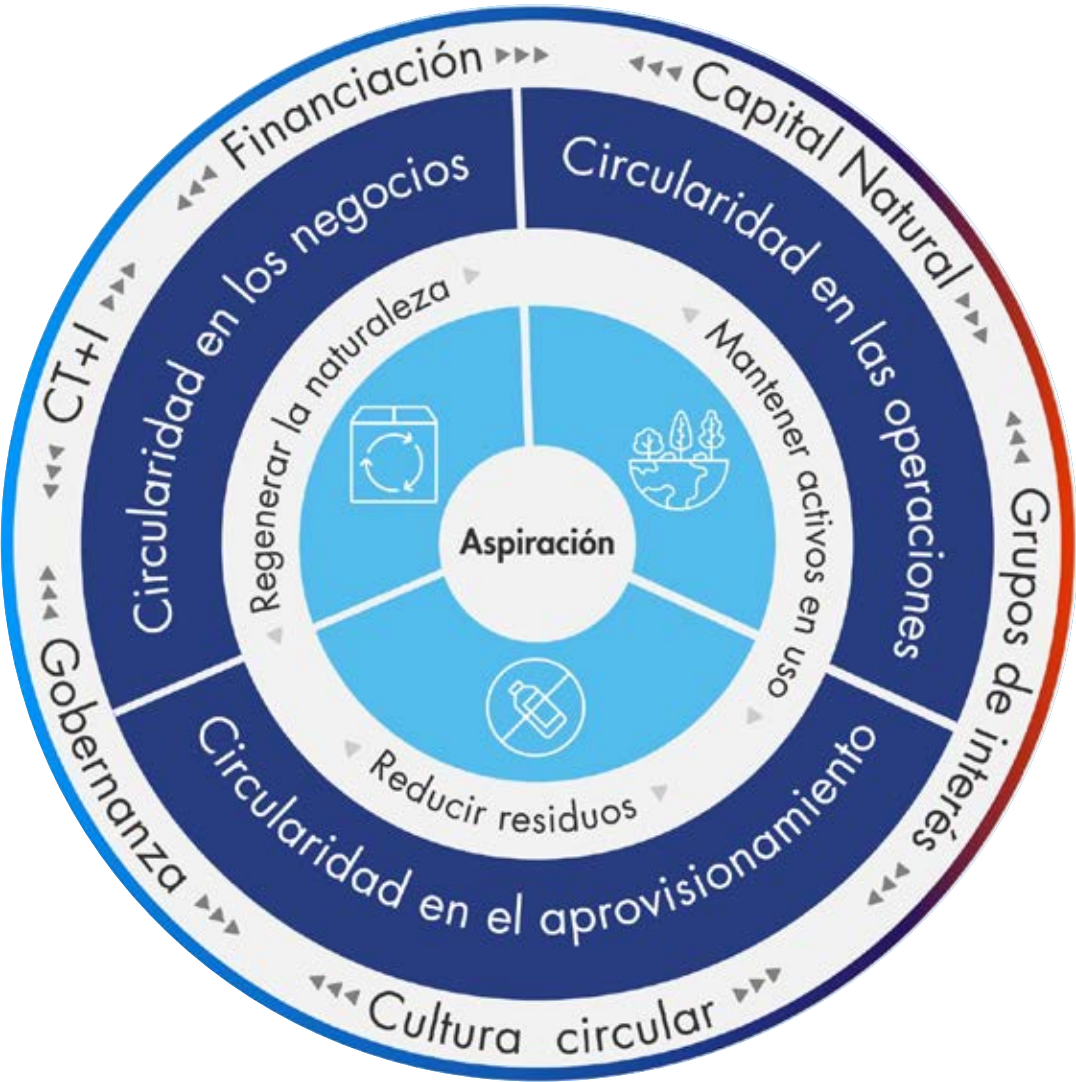
Transmission:

Engineering: Measurement of the reduction in resource use and emissions avoided through eco-design in projects.

Short term (2025-2027)

Roads:

Incorporation of 68% of secondary materials for road maintenance in Colombia (2027).
Chile: under construction

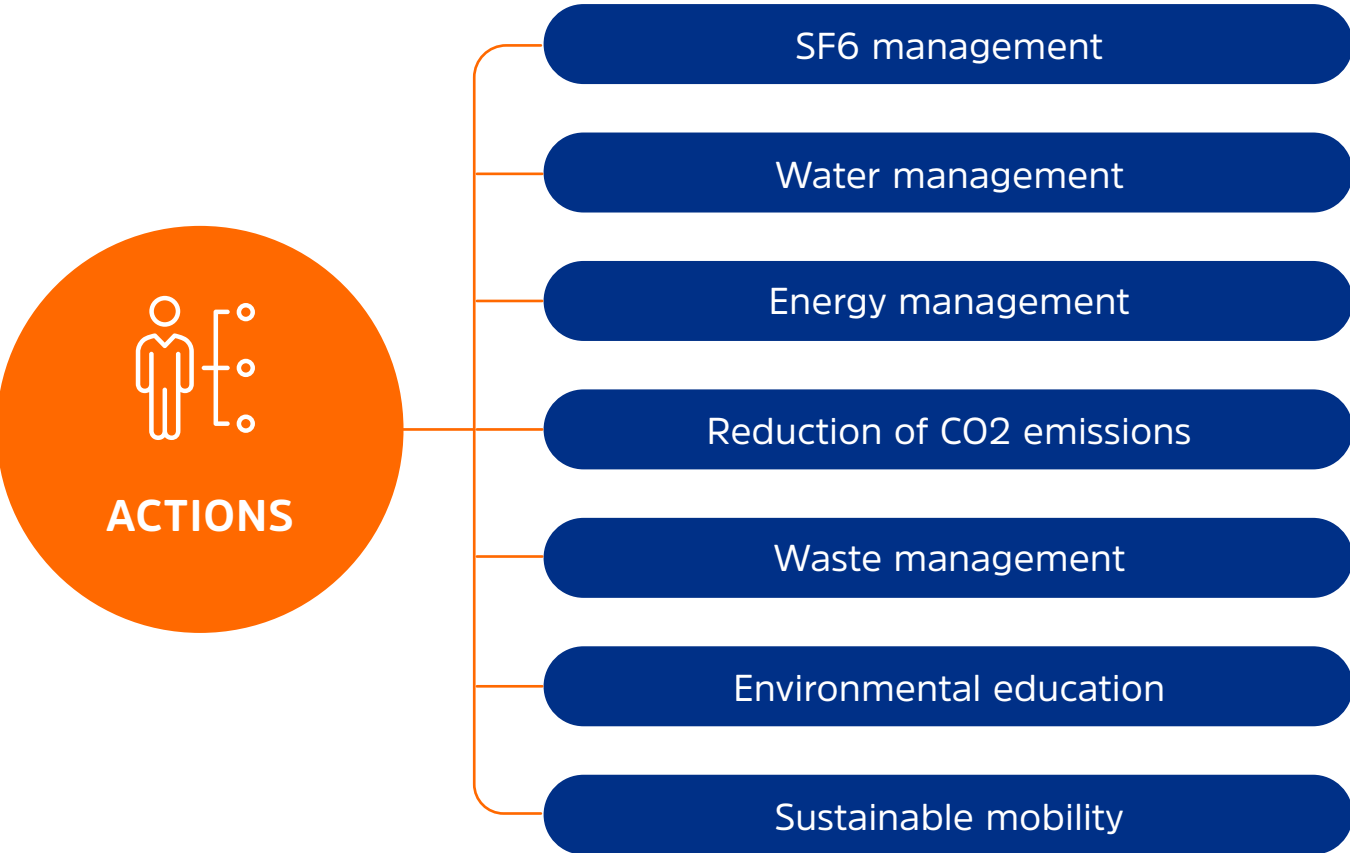


Sourcing circularity targets are under construction

To achieve the goals outlined in the model, ISA companies develop actions focused on the following variables: water, energy (both consumption and use of renewable sources), waste, sustainable mobility (including teleworking actions), and reduction of fugitive emissions of SF6.

To achieve knowledge management and the exchange of best practices in this field, ISA is developing a bank of initiatives to document and share them among companies.

To date, more than 37 practices have been developed, including the following:



Energy ISA Roads
Chile 2025 Renewable
Energy



Photos of some initiatives:



Rainwater harvesting



Solar panels



Artificial wetlands - water recycling



Environmental education campaigns



For further evidence, please refer to the social networks and websites of ISA companies:

Example of ISA INTERCOLOMBIA's environmental education campaigns: [▶](#)

Investment in projects in 2025:

In 2025, we invested approximately COP 2.97 billion in innovation, development, research, and training programs aimed at reducing energy and water consumption and waste generation during the year; projects or programs related to regulatory compliance are excluded.

ENERGY CONSUMPTION

GRI 302-3, 302-1, 302-2

Initiative	Description of the Initiative	Category	Companies that implement it
Switch to LED lighting	Replacement of conventional lighting systems with LED technology at headquarters, substations, and operational areas, significantly reducing energy consumption and associated costs.	Energy efficiency	ISA Colombia; ISA Vías Chile
Solar-Powered Self-Generation (Microgrids)	Implementation of solar microgrids for on-site electricity generation, improving energy resilience, reducing emissions, and enabling technology validation under real-world conditions.	Renewable Energy / Self-Generation	TRANSELCA; ISA Colombia
Renewable Energy Certificate (REC) Purchase	Purchase of renewable energy certificates (RECs) to offset electricity consumption with clean energy sources and reduce the associated carbon footprint.	Energy transition	ISA Group
Vehicle Fleet Replacement	Replacement of the internal combustion engine vehicle fleet with an electric fleet	Technological Transformation	ISA Vías Chile
Installation of electric vehicle charging stations	Facilitate the energy transition in the transportation sector by installing electric vehicle charging stations along roadways	Energy transition	ISA Vías Colombia - Ruta Costera
Energy Innovation Laboratories and Pilot Projects	Development of pilot laboratories at substations to test energy solutions such as microgrids, advanced metering, and energy-efficient equipment, validating technologies before scaling them up.	Energy Innovation	ISA Energía Soluciones (TRANSELCA)
Energy Consumption Measurement and Control	Implementation of measurement systems in support services and analytics platforms to monitor, manage, and optimize energy consumption.	Energy efficiency	ISA Group
Energy-efficient equipment	Procurement of high-efficiency equipment (air conditioning, rectifiers, lighting, auxiliary systems) that ensures lower energy consumption without affecting operational performance.	Energy efficiency	ISA Colombia; ISA Energía Soluciones (TRANSELCA)
Maintenance and Optimization of Energy Facilities	Monitoring the condition of equipment through inspections, thermal imaging, and condition analysis to identify deviations and improve energy efficiency.	Energy efficiency	ISA Group
Energy assessments	Technical assessments of energy consumption to identify opportunities for efficiency, loss reduction, and the transition to clean energy sources.	Energy planning	ISA Colombia; ISA Energía Soluciones (TRANSELCA)
Energy-related environmental education	Environmental education campaigns focused on efficient energy use and reducing energy consumption within the company and among external stakeholders.	Culture	All companies
Corporate Energy and Climate Change Management	Integration of energy management into environmental management systems, climate strategy, and corporate reporting in line with international standards.	Energy Governance	ISA

Few activities performed by ISA subsidiaries associated with Energy Transmission require the use of energy from non-renewable sources. In internal support processes, when there are failures in the power supply at the headquarters and assets, diesel backup power plants are used, although these failures occur on rare occasions.

By 2025, we expanded coverage to all ISA companies and business units (ISA, ISA ENERGÍA COLOMBIA, ISA ENERGÍA PERÚ, ISA ENERGÍA BRASIL and its wholly-owned subsidiaries), ISA ENERGÍA CHILE, ISA BOLIVIA, ISA VÍAS CHILE, ISA VÍAS COLOMBIA, INTEIA, and XM).

Energy consumption information is audited in two independent third-party verifications:

- Carbon-neutral certification process with ICONTEC (see climate change, carbon-neutral declaration: [▶](#))
- Process for verifying environmental variables with ICONTEC—see the “Circular Economy” section, “Third-Party Verification”: [▶](#)

Internally: In the quarterly committees carried out by ISA’s projects and operations area, energy consumption and company programs or projects to reduce or make efficient use of this resource are followed up and verified. In addition, some companies, such as ISA INTERCOLOMBIA, conduct internal audits of environmental management systems, including monitoring of consumption data and projects implemented.

The companies’ information is compiled by asset (substation, headquarters, office, etc.) and by equipment that is part of the companies’ own fleet; each company consolidates the information and reports it to ISA. In most companies the information is calculated directly from the invoices; in the case of auxiliary services, consumption is estimated or taken directly from meters installed in the assets.

TOTAL RENEWABLE ENERGY:

In 2025, 65% of total energy consumption comes from renewable sources, primarily due to companies’ purchase of certified renewable energy through I-REC. In addition, the different countries where ISA is present have an energy matrix with an increase in renewable energies. For example, in Colombia, the percentage of renewable energy remains above 70%. In addition, a micro-grid of solar panels has been installed at ISA’s main headquarters in Medellín, covering approximately 15% of the total consumption of the headquarters, and the other 86% is acquired through I-REC.



Energy ISA Roads Chile
2025 Electric Fleet

TOTAL NON-RENEWABLE ENERGY:

In 2025, 35% of total energy consumption came from non-renewable sources. Compared to 2022, non-renewable energy consumption decreased by 15% in 2025, mainly because companies are purchasing I-RECs, in addition to changes in the generation shares of each country’s energy matrix, shifts in non-renewable fuels, and the adoption of renewable energy.

The 2025 target was set as a 1% reduction in total non-renewable energy consumption compared to 2024. According to this, companies would have no margin to decrease their performance, and incentives are granted for annual continuous improvement.

In 2025, 98% of the non-renewable energy consumption target was achieved, falling short by 418.8 MWh.

WATER CONSUMPTION

GRI 303-5:

ISA has evolved from eco-efficiency initiatives toward a comprehensive water management model, incorporating operational efficiency, circular economy solutions, and robust governance across multiple regions.

Initiative	Description of the Initiative	Category	Companies that implement it
Rainwater Harvesting and Use	Implementation of systems to collect, store, and use rainwater at facilities and in operations, reducing the demand for municipal water and strengthening self-sufficiency for non-potable uses.	Reuse / Recirculation / Recycling	ISA Colombia; ISA Energía Brasil
Atmospheric Water Generation	Use of technologies that capture moisture from the air to produce water for consumption or other operational purposes at facilities.	Reuse / Recirculation / Recycling	ISA Colombia
Education and Training	Training and communication programs aimed at employees, contractors, or communities to promote water conservation and responsible water use.	Culture and Awareness	ISA Colombia
Monitoring and Control of Water Consumption	Systematic monitoring of water consumption through measurement, indicators, and deviation control to identify opportunities for savings and reduce losses.	Efficiency and Monitoring of Consumption	ISA Colombia; ISA Energía Brasil; ISA Vías Chile
Water-Efficient Technologies and Devices	Installation of water-efficient equipment and fixtures, such as high-efficiency faucets and flow regulators, to reduce water consumption at offices and facilities.	Water use efficiency	All companies
Stormwater Management	Collection, storage, conveyance, and eventual use of runoff water from yards, facilities, or substations.	Reuse / Recirculation	ISA Colombia
Water Resource Governance and Planning	Integration of water management into plans, goals, management oversight, environmental systems, and corporate reports, ensuring control, traceability, and alignment with the business strategy.	Governance / Planning	ISA
Reuse and Recirculation of Internal Water	Utilization of internal water streams, such as condensate or treated water, to replace the use of fresh water in operational and sanitary activities.	Reuse / Recirculation / Recycling	ISA Colombia
Sustainable stations: Alternative Solutions and Wastewater Treatment	Implementation and operation of sanitation and wastewater treatment solutions, including dry toilets, constructed wetlands, and treatment plants, to reduce environmental impacts and promote a circular economy.	Reuse / Recirculation / Recycling	ISA Colombia; ISA Vías Chile

Water ISA Energy Peru
2022 Flow Restrictor



Public information about the companies:

ISA ENERGÍA COLOMBIA, RI, pages: 118-119



As evidenced in the materiality analysis and in the life cycle of the assets, ISA and its companies do not make intensive use of water resources, since the businesses do not require large amounts of water for their operation. For ISA's main business unit, energy transmission, water consumption is for human consumption, cleaning and irrigation of the facilities.

Similarly, there were no changes in water storage by ISA companies, and this storage does not have a significant impact on the organization. However, we recognize the importance of proper management of this resource, which is why we promote programs in our businesses to ensure its responsible and efficient use and implement reuse and recycling initiatives.

Company information is collected by asset (substation, headquarters, office, etc.) each company consolidates the information and reports it to ISA, in most companies the information is calculated directly from the invoices when the water comes from a third party.

Information and projects related to water consumption are audited as part of the environmental variable verification process, which was conducted last year by ICONTEC for the companies that account for the largest percentage of ISA's revenue.

In addition, internally, in the quarterly commitments carried out by ISA's projects and operations department, water consumption and company programs or projects to reduce or make efficient use of this resource are monitored and verified.

Furthermore, some companies conduct internal audits of their environmental management systems, which include monitoring consumption data and the projects that have been implemented.

The analysis of the data presented in the indicator covers 100% of the operations of ISA companies (including energy, transportation, and telecommunications). By 2025, we will expand our coverage to include all ISA companies (ISA, Inteia, ISA ENERGÍA BRASIL, ISA ENERGÍA COLOMBIA, ISA ENERGÍA CHILE, ISA ENERGÍA PERU, ISA VIAS CHILE, RUTA COSTERA, XM, INTERNEXA).

When analyzing the data based on the broadest set of companies available for each year, the consolidated data for all ISA companies shows an upward trend in performance over the past four years (2022-2025), as evidenced by the increase in revenue (approximately 20%).

Regarding the established goal, since 2018 it was proposed to reduce water consumption by 5% by 2019. After achieving this reduction, most companies achieved high levels of efficiency, leaving limited room for further improvement. Therefore, starting in 2020, a new reduction target of 1% per year was set compared to previous years. In this way, companies have maintained their good performance and, at the same time, incentives have been implemented to promote continuous improvement year after year.

In 2025, the goal was set at a 1% reduction in the total net water consumption in 2024 from ISA companies' operations, representing an expected reduction of 0.295 million m3. In 2025, the established water consumption target was met, with consumption reaching 0.295 million m3—a 0.98% decrease from the previous year—thanks to the practices implemented by the companies.

Companies continue to develop actions to reduce the environmental impacts caused by water consumption. We highlight as best practices the implementation of training plans on the efficient use of resources and rainwater harvesting systems, rainwater runoff in yards, atmospheric water generators, filtration equipment for reuse of gray water, low water consumption toilet systems, composters and incinerators, and wastewater treatment through wetlands in some substations, and the recycling of all this water in substations.

WASTE MANAGEMENT:

Energy Transmission is a service activity. Materials used at the end of their life cycle generate waste that can be recycled, mostly industrial leftovers, which are incorporated back into the production line to generate the same component or other materials. The waste reported during the period is generated in the operation and maintenance of the headquarters, substations and transmission lines. There is a low level of waste generation in the activities of the energy transmission business unit; however, we are committed to efficient waste management.

In the case of ISA's other business units, such as highway concessions, waste is generated, including construction and demolition waste (CDW), organic and yard waste, household and office waste, uncontaminated scrap metal, and end-of-life tires (ELTs). Meanwhile, in the telecommunications business unit, waste is generated in the form of discarded copper and fiber-optic cables, plastics and metals from dismantled equipment, packaging materials, and obsolete electronic equipment that does not contain hazardous components. These are properly managed, and significant circularity initiatives are also implemented.

Initiative	Description	Category	Companies
Composting Organic Waste	Implementation of composting systems to recover value from organic waste and reduce final disposal.	Resource recovery	ISA Energía Colombia
Recyclable Waste Management	Source separation, recycling stations, and recycling practices at offices and operational facilities.	Recycling	ISA Energía Colombia; ISA Energía Chile; ISA Vías Chile
Partnerships with waste management companies and recyclers	Agreements with cooperatives, NGOs, and service providers for recycling and traceability.	Value Chain	ISA Energía Brasil; ISA Energía Perú
WEEE Management	Post-consumer management of electronic waste through specialized providers.	Special Waste	ISA Energía Colombia; ISA Energía Perú
Elimination of Single-Use Plastics	Reducing and Phasing Out Plastics in Offices.	Prevention	ISA Energía Brasil; ISA Energía Chile; ISA Energía Colombia
Waste Measurement	Implementation of indicators and scales to monitor waste generation.	Governance	ISA Energía Brasil
Management Infrastructure	Collection and storage centers, and on-site sorting stations.	Operations Management	All companies
Waste Reuse	Use of waste materials for decorative purposes or interior applications.	Circular economy	ISA Energía Colombia
Recycling in Infrastructure	Use of Recycled Plastic and Asphalt in Road Projects.	Circular Innovation	ISA Vías Chile; Ruta Costera
Biodigesters	Replacement of septic tanks with biodigesters for wastewater treatment.	Resource recovery	ISA Energía Perú
Culture and Awareness	Campaigns promoting recycling, waste separation, and responsible consumption.	Culture	All companies
Operational Waste Management	Waste management plans for offices, toll booths, and rest areas.	Operations Management	All companies
Replacement of Polluting Materials	Switching to alternative materials to reduce the generation of hazardous waste.	Prevention	Internexa
Environmental Management Systems	Structured waste management within corporate environmental systems.	Governance	All companies



Waste ISA Roads Chile
2025 Space Recovery

Audits and monitoring of proper waste management at ISA and its companies are carried out through four actions:

- Audits are conducted for GRI indicators; for 2025, the audits were carried out with ICONTEC. See third-party verification: ISA circular economy model, third party verification [▶](#)
- Audits of the environmental management systems of ISA's operations.
- Audits carried out to achieve carbon neutrality of ISA and its companies, auditing the actions implemented to reduce emissions, including waste reduction. See: climate change, carbon neutral declaration: [▶](#)

- Internal follow-up and monitoring of waste management and reduction actions is carried out in the quarterly committees held by ISA's project and operations departments.

For proper waste management, ISA companies develop agreements with waste managers that certify the final disposal of waste, as well as the detour of waste from the landfill, certified by an independent accredited body.

Examples:

- ISA Energía Colombia has an agreement with a company for the management, recovery, recycling, and valorization of waste. See ISA Energía Colombia's IR pages: 221: [▶](#)
- ISA Brasil: IR 2025, pages 75, 77: [▶](#)

The amount of waste is calculated by adding up the quantities collected by the municipal waste collection service provider, as specified in the invoices, and, in the case of some companies, through direct measurement.

The coverage achieved in 2025 for waste disposal corresponds to the 11 companies (ISA, ISA Energía Colombia, ISA Energía Perú, ISA Energía Brasil and its subsidiaries, ISA Energía Chile, ISA Energía Bolivia, ISA TRANSELCA, ISA Vías Chile, XM, INTERNEXA, and ISA Vías Colombia (Ruta Costera), INTEIA).

Non-hazardous waste:

In 2018 we set a target to reduce waste sent to landfills by 5% by 2019. Once we achieved it, most of our companies have reached high levels of efficiency, with little room for continuous improvement; therefore, starting in 2020, a reduction target equivalent to 1% of the previous year's figure has been set for the companies, in order to encourage increasingly demanding annual performance year after year.

All ISA companies were included in the 2025 target. The goal was set at a 1% reduction in waste sent to landfills by 2024. According to this, affiliates will have no margin to decrease their performance and continuous annual improvement is encouraged.

An analysis of the trend over the past four years shows a 64% decrease in waste sent to final disposal, normalized by operating revenue.

With regard to the annual target, 64% was achieved in 2025; the waste reduction target was not met, primarily due to maintenance work at some substations, progress on projects to reinforce and improve the transmission infrastructure, and major maintenance at ISA Vías Colombia and Chile.

The subsidiaries continue to develop actions to reduce the environmental impacts caused by waste generation. We would like to highlight that, thanks to the initiatives carried out in 2025, companies were able to recycle, recover, reuse, and recover value from approximately 81% of their waste relative to the total waste generated.

HAZARDOUS WASTE

The amount of hazardous waste generated by our energy transmission business is low; however, we are committed to efficient waste management.

The main hazardous wastes generated in the energy transmission activity are electrical and electronic equipment, contaminated plastic, oleophilic material contaminated with oils, oil and/or air filters, silica or fluorescent tubes.

Given the criticality of these wastes due to their characteristics (Corrosive, Reactive, Explosive, Toxic, Flammable and Biological-Infectious), and to the applicable environmental regulations, this variable covers all energy transmission subsidiaries since 2016, except ISA Energía Chile, which became operational in 2018 and currently reports this variable.

By 2025, the scope of the information will be expanded to include all ISA companies (ISA, ISA INTERCOLOMBIA, ISA Energía Perú, ISA Energía Brasil and its subsidiaries, ISA Energía Chile, ISA BOLIVIA, ISA TRANSELCA, ISA Vías Chile, XM, INTERNEXA, and Ruta Costera, INTEIA).

The amount of waste managed in the period is obtained from the sum of the amounts delivered to the hazardous waste manager, as evidenced in the transport manifests and certificates of recovery and/or final disposal.

Audits and follow-up on the proper management of waste at ISA and its companies are carried out in 5 actions:

- Audits are conducted for GRI indicators; for 2025, the audits were carried out with ICONTEC. See third-party verification: [ISA circular economy model, third party verification](#): 
- Audits of the environmental management systems of ISA's operations.
- Audits carried out to achieve carbon neutrality of ISA and its companies, auditing the actions implemented to reduce emissions, including waste reduction. See: [climate change, carbon neutral declaration](#): 

Waste ISA Roads Chile
2025 Calisthenics Plaza



Waste ISA Energy Peru
2022 Waste Segregation
and Recycling



- Internal follow-up and monitoring of waste management and reduction actions is carried out in the quarterly committees held by ISA's project and operations departments.
- Companies with integrated management systems conduct audits that include this component.

All ISA companies were included in the 2025 target. Since the data recorded in 2024 was considered statistically outlier, the average amount of hazardous waste sent to final disposal between 2022 and 2023 was used as the baseline for setting the 2025 target. Based on this calculation, the maximum amount of hazardous waste sent to final disposal by companies was 142 metric tons, equivalent to a 1% reduction compared to

the established baseline. Based on these principles, the subsidiaries maintain high standards that prevent the need for rework in their environmental performance and promote incentives for continuous annual improvement.

In 2025, the hazardous waste target was met primarily due to the best practices implemented by companies, including agreements with third parties that recover waste (see the waste management table).

Companies continue to develop actions to reduce the environmental impacts caused by waste generation. Some consolidated practices are:

- Hazardous waste is identified at source and classified in accordance with local and international regulations.
- Hazardous waste is temporarily stored in authorized warehouses or salvage yards, complying with technical and environmental requirements. Containers labeled by type of waste are used and proper segregation is ensured.
- ISA hires specialized management companies with current environmental permits. ISA's responsibility for the waste does not end until it receives the final disposal certificate from the waste manager.
- Contractors must comply with ISA guidelines, including hazardous waste management

plans, training records, contingency plans and delivery of environmental authorizations of the managers used.

- ISA monitors indicators such as tons of hazardous waste recycled, incinerated or disposed of in safety cells.
- The company promotes internal environmental awareness campaigns and participates in courses such as the one offered by the Ministry of Environment on comprehensive hazardous waste management.
- Industry standards that establish requirements for hazardous waste (RESPEL for its acronym in Spanish) warehouses, health permits, labeling, and maximum storage periods.
- Companies maintain records and monitor managed hazardous waste, manifests, and containment requirements to prevent contamination from dielectric oils.
- HSE manuals that define requirements for contractors, such as final disposal certificates, classification in accordance with regulations, and control of exported waste

In addition, it is noted that by 2025, a waste utilization rate of 70% of the total waste generated was achieved.

ENVIRONMENTAL IMPACTS DURING THE LIFE CYCLE OF THE ASSET

ISA has four business units including Energy Transmission, Road Concessions, Information and Communication Technologies, and Real-Time Systems Management. Among them, ISA's core business is Energy Transmission, which consists of transmission of energy generated to distributors. Transmission is fundamental to an energy market as it is the meeting point between generation and demand, and is the means of executing electric power exchanges.

Most of the ISA companies do not own or operate their own fleet of vehicles, therefore, there is no significant generation of NOx emissions. Most transportation for maintenance activities, business travel, and employee commuting is provided by contractors and public transportation.

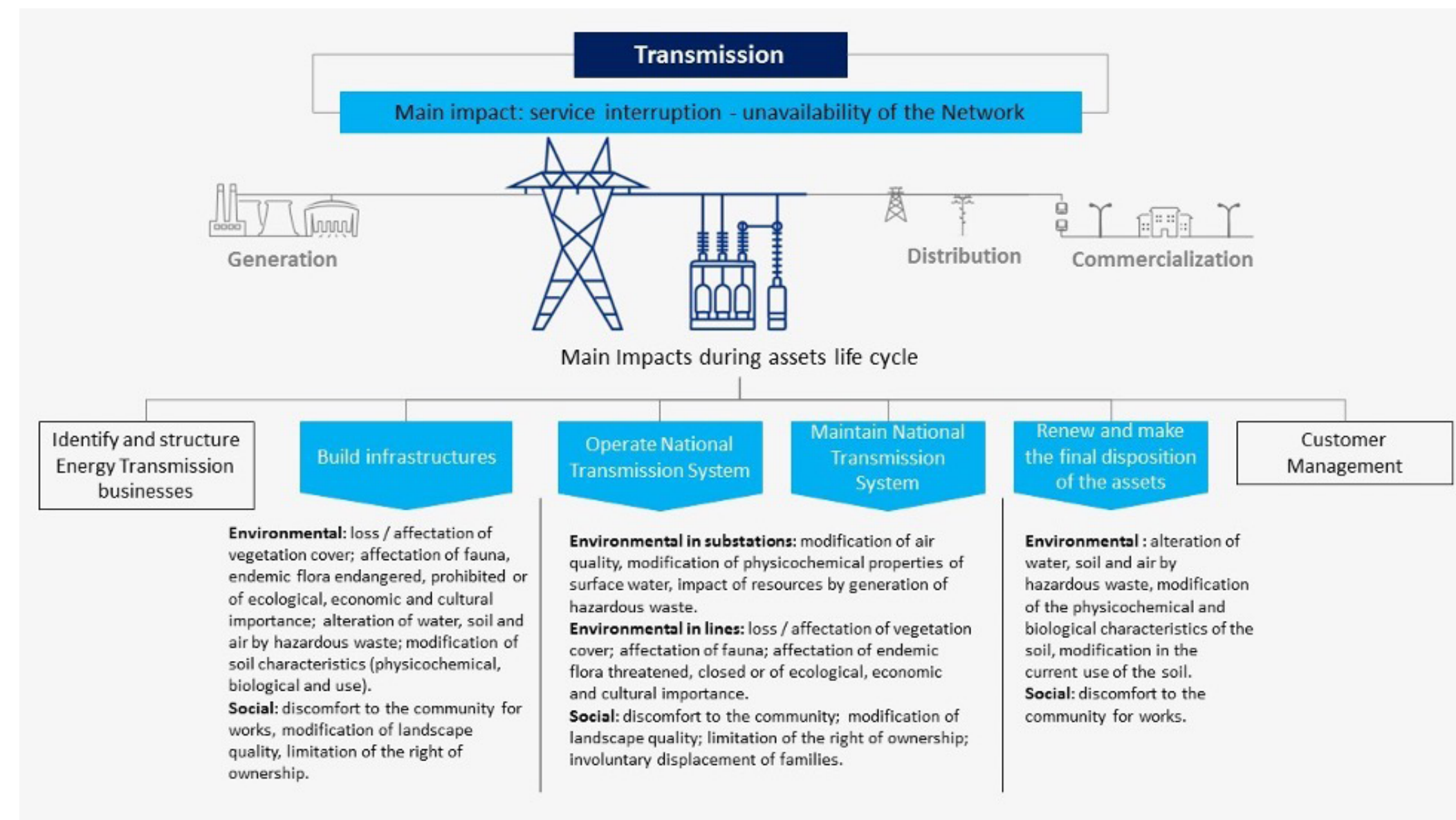
In addition, we do not perform combustion in our processes that generates NOx, SOx, PM10, ash and gypsum, mercury or dust during the operation and maintenance of the Energy Transmission business. The main materials and equipment operated to provide this service are current, voltage and power transformers, as well as reactors, circuit breakers, disconnectors, tower profiles, insulators, power cables, dielectric oil and electronic equipment, among others, none of which require a combustion process in

the production cycle that generates emissions of NOx, SOx, ash and gypsum, mercury or dust.

These materials are not transformed at any point in the life cycle of the asset of ISA or its

companies, which consist mainly of assemblies of different metal parts without the need to burn any fuel or use a material that can generate emissions.

Throughout the life cycle of ISA's assets, plans are monitored and implemented to reduce and manage environmental impacts.



ENERGY TRANSMISSION LOSSES:

Transmission	2022	2023	2024	2025
Transmission losses (in %)	3.1	2.4	2.5	2.4

Losses in the energy transmission network are difficult for transmission companies to manage, as they depend mainly on three external elements:

- The technical characteristics of the electrical equipment used, corresponding to the most cost-effective design.
- The load connected to the infrastructure and its topology.
- The infrastructure that goes in or out of operation and that supports or overloads the system.

Furthermore, this process is controlled by each country’s system operators and their respective regulatory frameworks, which establish criteria for operation and expansion, as well as efficiency standards for the transmission grid—where losses are just one factor in the optimization process.

Calculation Methodology

Losses are calculated as the difference between the energy entering the infrastructure and the energy leaving it. By dividing this difference by the input energy, we obtain the percentage of losses during the transmission process, according to the following formula:

%Loss =
[{Generation - Demand} / {Generation}] * 100

Where:

- **% Losses:** Percentage of losses in the transmission system.
- **Generation:** Energy entering the transmission system (MWh)
- **Demand:** Energy consumed or supplied by the system (MWh)

- **Generation (MWh):** 388,295,654
- **Demand (MWh):** 378,955,847
- **Losses (MWh):** 9,339,807
- **Losses (%):** 2.405%

Compared to 2024, the 2025 results show a slight decrease to 2.405%; although the amount of energy transmitted remains virtually constant, the system shows improved efficiency, keeping losses within a controlled range.

TRANSMISSION RELIABILITY:

ISA uses a robust set of metrics to continuously monitor the reliability of its power transmission infrastructure. Key performance indicators include:

- **Energy Not Supplied (ENS):** quantifies the energy that was not delivered as a result of both scheduled and unscheduled outages in the transmission system.
- **Equivalent Outage Duration (EOD):** This metric allows for an overall comparison of the energy not supplied relative to the system’s peak demand.
- **Reliability Index:** It is calculated by comparing the energy not supplied with the total energy demanded by the system.
- **Availability:** This refers to the percentage of time, within a 12-month rolling window, during which the transmission infrastructure is operational.

In addition, energy transmission companies do not normally keep a direct record of the end users affected by each disconnection in their systems -this activity is the responsibility of the power distribution sector-, so we estimate the System Average Interruption Duration Index (SAIDI) based on reliability.

YEAR	2023	2024	2025
Reliability [%]	99.9972%	99.9969%	99.9968%
DEI [h]	0.1349	0.1403	0.0947
SAIDI [h]*	0.248	0.272	0.280

* Estimated with the reliability index.

The energy not supplied (ENS) and the maximum system demand are calculated by the public agencies responsible for the operation in each of the countries where ISA has a presence:

- COLOMBIA: [▶](#)
- PERU: [▶](#)
- BRAZIL: [▶](#)
- CHILE: National Electric Coordinator [▶](#)
- BOLIVIA: CNDC – National Freight Forwarding Committee [▶](#)



During the period under review, ISA maintained reliability levels close to 100%, reflecting the structural and operational strength of the transmission system. However, trends in the DEI and SAIDI indicators reveal new operational dynamics associated with external factors that affect the system’s performance

ICONTEC-CERTIFIED AUDIT EVIDENCE, SEE: Eco-efficiency and the circular economy, Download, third-party verification [▶](#)

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CONEXIONES QUE INSPIRAN