

**90** YEARS

**GRUPO ARGOS**  
Investments that transform



**VALUE ADDED STATEMENT  
METHODOLOGY**

**2023**





# Content

01

Introduction

Page 3

02

Impact Valuation Results

Page 4

03

Bibliography

Page 11

Túnel Aburrá Oriente  
Antioquia

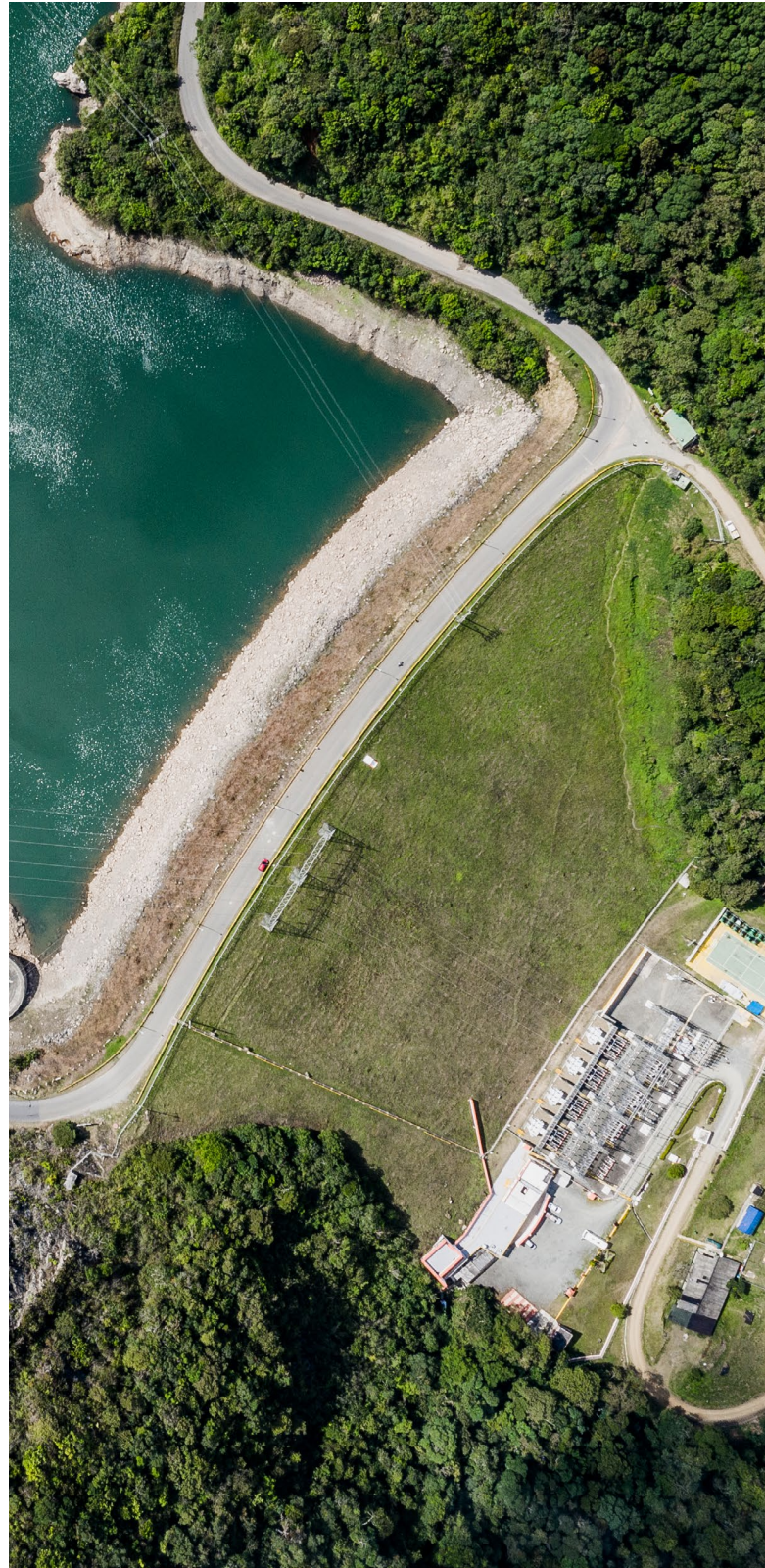




# Introduction

At Grupo Argos, we transcend our search for profitable growth, making decisions that consider the risks, opportunities, and impacts of our businesses and investments and contributing to our company's permanence over time. This encourages us to give more back to our environment than what we take from it, as we are aware of our responsibility as agents of social transformation.

We transform the different kinds of capital used by our operations into value. This includes financial, human, intellectual, social, and relational capital. Throughout this process, we generate negative and positive impacts. To measure it, we use **KPMG's True Value methodology**, and therefore we develop the measurement of our own externalities, which reflect the positive and negative impact of our operations.



# Impact Valuation Results

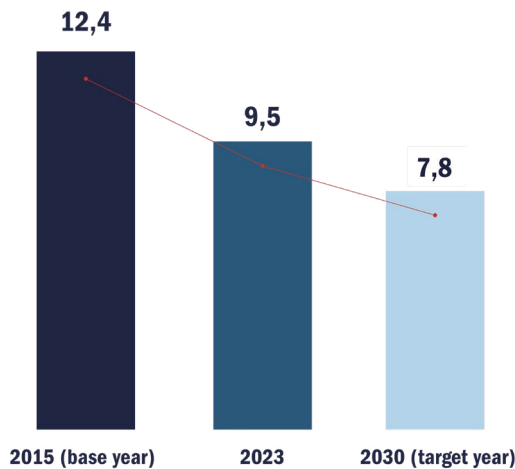
As Grupo Empresarial Argos's, we have developed an impact valuation for four of our main externalities:

## Climate Change

Outcome	Metric t of GHG emissions			
Type of impact:	<input type="radio"/> Positive	<input checked="" type="radio"/> Negative	<input type="radio"/> Both combined	
External stakeholder(s)/ impact area(s) evaluated:	<input checked="" type="radio"/> Environment	<input checked="" type="radio"/> Society	<input type="radio"/> Consumers/end-users	<input type="radio"/> Supply Chain

In 2023, Grupo Argos and its businesses emitted **9.52 million metric tCO<sub>2</sub>e** of GHG into the atmosphere. Mainly, these emissions come from the calcination process of the cement business and the use of fossil fuels being transformed into heat and energy in the cement and energy businesses.

**Graph 1.** Output Metric Progress: GHG emissions Scope 1 + Scope 2 reduction in million metric tCO<sub>2</sub>e



Cementos Argos Harleyville Plant  
United States



Our impact valuation process consists of multiplying Grupo Empresarial Argos's GHG emissions by a multiplier called the Social Cost of Carbon. This multiplication results in a monetized impact of GHG emissions:



Social cost of carbon reflects the cost of the impacts generated by GHG emissions over their lifetime for society and it considers changes in net agricultural productivity, human health, property damages from increased flood risk and value of ecosystem services due to climate change. However, estimates vary based on the discount rate, which determines the present value of future impacts of climate change. This multiplier is taken from a study conducted by the Environmental Protection Agency (EPA) (2013).

After applying our impact valuation process based on **KPMG's True Value methodology**, the monetized impact of GHG emissions for 2023 was **USD -402 million**.

Climate Change (CC) is a critical challenge for our planet, and we are committed to contributing to the transition towards a low carbon economy. Therefore, Grupo Argos has led the Climate Change strategy, together with our cement, energy and road and airport concessions. Our CC commitments by 2030 are: (a) 46% reduction in the intensity of CO<sub>2</sub>e emissions, 2018 as baseline, and a 37% reduction in absolute CO<sub>2</sub>e emissions, 2015 as baseline.

We support our businesses in consolidating climate change risks and opportunities identification, allowing us to prioritize active participation with allies such as academia, government, and NGOs, among other relevant actors, to support the achievement of CC goals and increase the resilience of our operations. Additionally, Within the framework of our Sustainability Policy, we recognize the importance of having a respectful relationship with the environment in all actions. This is why we continuously apply our Grupo Empresarial Argos's Environmental Policy whose main purpose is to establish the guiding principles on environmental issues across our entire operations, products or services, distribution and logistics activities, suppliers and contractors, due-diligence processes, mergers and acquisitions and allies in the different businesses that we have, regardless of region or country where they operate.

Finally, it is important to mention that we also have a variable compensation system that promotes the achievement of the organization's strategic and corporate objectives. Depending on each employee's level in the organization, two types of variable incentives may apply: (i) short term, and (ii) long term. In the long term, we incorporate sustainability elements into the incentives that represent at least 15% of the total. **These include climate change related indicators**, such as meeting the annual CO<sub>2</sub>e emissions reduction target defined for each company in Grupo Empresarial Argos; these, in turn, are aligned with some variables of certain loans acquired by Grupo Argos that are tied to performance in ESG sustainability indicators. Likewise, the short-term incentives of some teams also include climate change related indicators, such as achieving carbon neutrality for Grupo Argos, developing a roadmap to reduce scope 3 emissions, among others.

To know more about our subsidiary's climate change strategy, please visit the following links:

- » [Cementos Argos](#)
- » [Celsia](#)
- » [Odinsa](#)



Pacífico 2 Bridges over the Cauca River  
Antioquia

## Nature and Resource Efficiency

Outcome

Water consumption in millions of cubic meters

Type of impact:

Positive  Negative  Both combined

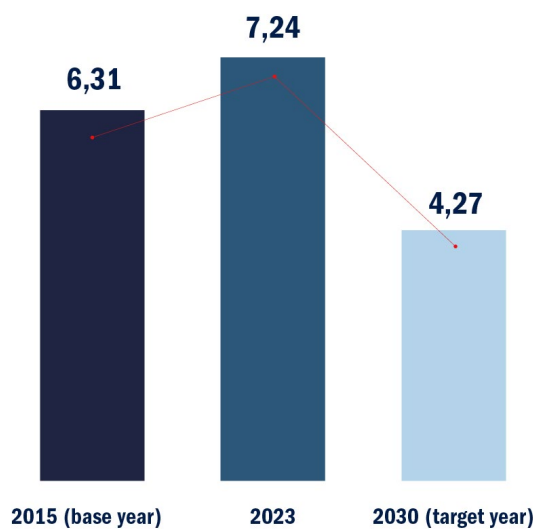
External stakeholder(s)/  
impact area(s) evaluated:

Environment  Society  Consumers/end-users  Supply Chain

In 2023, Grupo Empresarial Argos's water consumption was **7.24 Mm<sup>3</sup>**. However, only 6% of this water consumption came from water-stressed areas.

**Impacts due to our water consumption caused by our own operations and products** could affect the environment, and society. Increasing scarcity of clean water could cause degradation of ecosystems and has effects on water availability, health, recreation, biodiversity, etc.

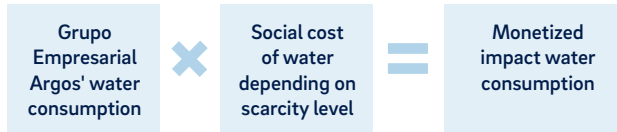
**Graph 2.** Output metric Progress: Water consumption reduction in Mm<sup>3</sup>



Realismo Mágico Park  
Atlántico



Just like in our previous impact valuation assessment, water consumption is multiplied by the social cost of water. This multiplication results in a monetized impact of water consumption:



The multiplier used to monetize water consumption varies according to scarcity and it was taken from a study conducted by TruCost (2013) which is aligned with water valuation approaches of other companies. It considers the direct non-consumptive use and indirect use of water, e.g., value for recreation, biodiversity, groundwater recharge and waste assimilation.

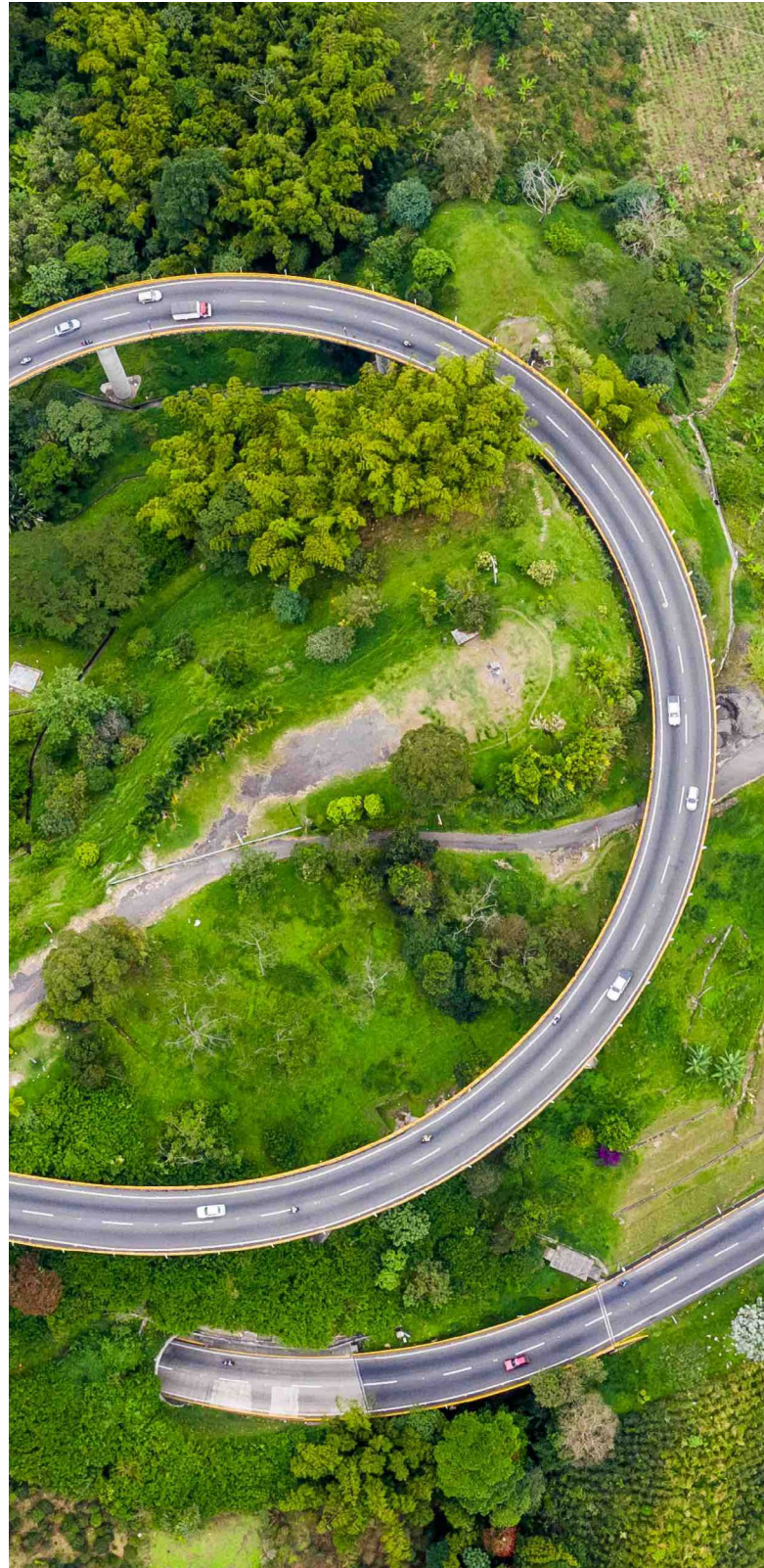
To link the water scarcity percentages with the groundwater scarcity levels, the following grouping was made: abundant ( $\leq 10\%$ ), sufficient ( $>10; \leq 50\%$ ), stress ( $>50; \leq 80\%$ ), scarcity ( $>80; <100\%$ ) and extreme scarcity ( $=100\%$ ).

After applying our impact valuation process based on **KPMG's True Value methodology**, the monetized impact of water consumption for 2023 was **USD -209,759**. This result is distributed in the following quantities according to the scarcity level: USD -6,920 in extreme scarcity areas, USD -58,883 in scarcity areas, USD -94,921 in water-stressed areas, USD -44,001 in sufficient water reserves areas and USD -5,034 in water abundant areas.

We recognize the importance of making responsible consumption of water, especially in extreme water scarcity areas. This is why we aim to achieve a 55% reduction in our total water consumption intensity by 2030, measured in cubic meters per million COP in revenue and 2020 as baseline year.

If you want to know more about our subsidiary's water management, please visit the following links:

- » [Cementos Argos](#)
- » [Celsia](#)
- » [Odinsa](#)





## Outcome

Total hectares affected and rehabilitated

## Type of impact:

 Positive
  Negative
  Both combined
External stakeholder(s)/  
impact area(s) evaluated:
 Environment
  Society
  Consumers/end-users
  Supply Chain

Extraction operations and facilities of our subsidiaries' operations affect biodiversity, depending on the type of ecosystem, the surface impacted, and the type of activity performed. We acknowledge the value of biodiversity and are committed to prevent, mitigate, correct, and compensate for its impact.

In 2023, Grupo Empresarial Argos's total hectares rehabilitated were **2,283 Ha**, whereas total hectares affected were **-10,830 Ha**. This result gives us a net impact on biodiversity, our output metric for this assessment, equal to **-8,547 Ha**.



Cajamarca Substation  
Tolima



The impact on natural habitats occurs **by our operation** mainly in the processes of sourcing raw materials (cement) land use (Real State business), roads (concessions) and transmission grids (energy).

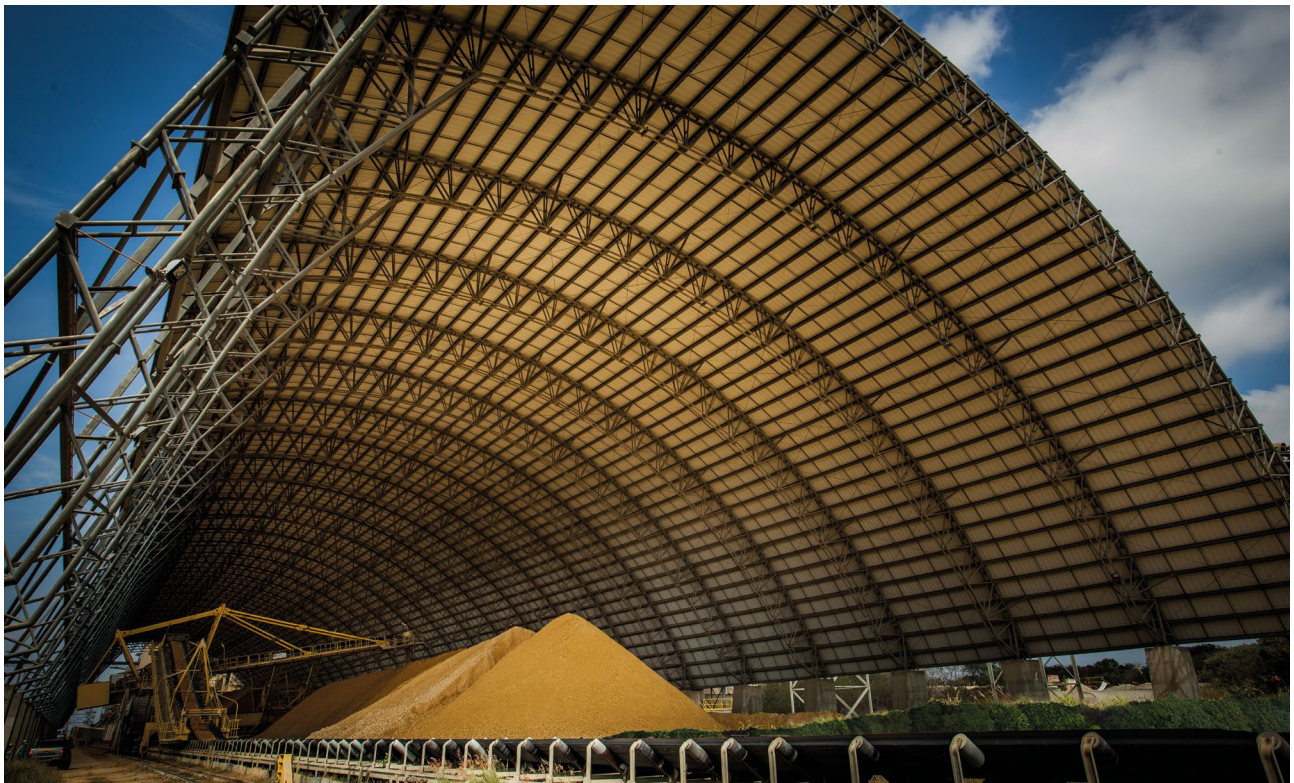
Our net impact on biodiversity is monetized according to the following equation:



Data required to calculate social cost of restoring biodiversity came from the Economics of Ecosystems & Biodiversity, climate issues update TEEB (2009), and it considers on its calculation the following ecosystems: Tropical forests, other forests, Woodland/shrubland, Grasslands, Inland wetlands, Lakes/rivers, Coral reefs, Coastal and Mangroves. In case of uncertainty on the type of ecosystems affected or rehabilitated, a conservative estimation was adopted by selecting the 'worst case scenario' (e.g., degradation of tropical forests, restoration of grasslands).

After applying our impact valuation process based on **KPMG's True Value methodology**, the monetized net impact on biodiversity for 2023 was **USD -489,831**. This result is distributed in the following quantities according to the type of ecosystem: USD -54,443 in tropical forests, USD 1,219 in other forests, USD -43 in Woodland/shrubland, USD -6,528 in Grasslands, USD 0 in Inland wetlands, USD -430,099 in Lakes/rivers, USD 0 in coral reefs, USD 0 in coastal and USD 64 in mangroves.

Guidelines for our subsidiaries are focused on monitoring actions and developing voluntary & mandatory initiatives to reach the target of the net positive impact (NPI). NPI is a target for project outcomes in which the impacts on biodiversity are outweighed by the actions taken to avoid and reduce such effects, rehabilitate affected species/landscapes, and offset any residual impacts. As part of our commitment our business group target is to plant 25 million trees by 2030 and in some subsidiaries such as Cement, we are committed to rehabilitate 90% of released areas.



Cementos Argos Cartagena Plant  
Bolívar



## Talent, Occupational Health and Safety

### Outcome

Number of work-related fatalities on employees

### Type of impact:

Positive  Negative  Both combined

### External stakeholder(s)/ impact area(s) evaluated:

Environment  Society  Consumers/end-users  Supply Chain

Incidents could occur during our investments' operations (e.g., use machinery, road safety) and illnesses appear due to working conditions (e.g., diseases related to dust, noise or ergonomics). Occupational illnesses and incidents could lead to lower productivity, higher costs, and reputation damage for the company, and this is already included in the financial results. However, it also affects our employees' families as well as the broader local communities and governments through healthcare and administrative costs and quality of life.

We classify employee-related incidents into four main categories: fatalities, lost-time injuries with short absences, lost-time injuries with long absences and occupational illnesses. As we mentioned earlier, **Work-related injuries and illnesses are impacting employees, employers, and governments (e.g., productivity losses, healthcare costs, administrative fees, quality of life)**. As the employers' costs are already included in the financial results, the social cost of occupational injuries and illness is calculated using the average cost per incident both for employees and community.

We have had a zero-employee fatality record for the past three fiscal years. However, in 2020, Cementos Argos, our construction materials investment, did have a fatal incident.

Grupo Empresarial Argos's occupational incidents are monetized according to the following equation:

$$\begin{array}{|c|} \hline \text{Grupo Empresarial} \\ \text{Argos' number of} \\ \text{incidents per severity} \\ \hline \end{array} \times \begin{array}{|c|} \hline \text{Community} \\ \text{and} \\ \text{work costs} \\ \hline \end{array} = \begin{array}{|c|} \hline \text{Monetized} \\ \text{occupational} \\ \text{incidents} \\ \hline \end{array}$$

The community & work costs multiplier is based on a meta study conducted by safe work Australia (2012). However, to make the costs country specific, numbers were adjusted through the local GDP per capita.

After applying our impact valuation process based on **KPMG's True Value methodology**, the monetized occupational incidents for 2023 was USD **-6,986**. This result is distributed in the following quantities according to the type of the event:

**USD 0 due to fatalities**, USD -938 due to lost time injuries with short absence, USD -2,838 due to lost time injuries with long absence and USD -3,210 due to occupational illnesses.

Fatalities not only affect our cash flow, but also have a negative impact on our employees' families and society. This is why all our subsidiaries have their own OHS policies, OHS Programs, and zero fatalities as a target. Additionally, Grupo Argos, as a holding company, assesses its subsidiaries' performance in some key KPIs such as lost time injury frequency rates and severity indexes on employees and contractors.

Just like our climate change analysis approach, our subsidiaries have a variable compensation system triggered by the achievement of occupational health and safety KPI targets. For instance, Celsia and Cementos Argos have specific company targets for KPIs like lost time injury frequency rates, severity index, and fatal accidents absence. These KPIs contribute 20% to Celsia's short-term variable compensation, encompassing both lost time injury frequency rates and severity indexes. On the other hand, Cementos Argos only focuses on preventing fatalities, with this KPI influencing 10% of their short-term variable compensation.

Finally, Grupo Argos' has developed an OHS policy that is applicable to all its operations, employees, and contractors, regardless of the region or country where they operate. The purpose of the Occupational Health and Safety Policy is to establish the guiding principles on Occupational Health and Safety for the entire group.

If you want to know more about our subsidiary's OHS management programs and policies, please visit the following links:

- » [Cementos Argos](#)
- » [Celsia](#)
- » [Odinsa](#)



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