

C0. Introducción

C0.1

**(C0.1) Proporcione una descripción general y una presentación de su empresa.**

Cementos Argos, is a cement, concrete and aggregates producer with headquarters in Colombia and a network of operations across three regions: Colombia, the United States, and Central America & the Caribbean. The company has 7 cement plants in Colombia, 4 in the United States, and 2 in Central America; 8 grinding facilities located in the United States, Haiti, Panama, Dominican Republic, Honduras, French Guiana, and Surinam; and 33 ports and terminals. The company also has more than 265 concrete plants located across the three regions mentioned before. Its total installed capacity is 23 million tonne of cement and 16.5 million cubic meters of concrete per year. Argos is the market leader in the cement and concrete business in Colombia, the second concrete company and fourth cement company in the United States, and one of the largest in the Caribbean and Central America.

A fundamental part of the business vision at Argos is the creation of sustainable value, which it is one of the company's five strategic objectives. This approach ensures long-term permanence and a competitive position in a market that is continuously becoming more dynamic, generating not only products and services that truly add value for the organization's stakeholders and society, but also establishing a proper manner of behaving and conducting operations in all regions where the company is present.

Argos seeks the creation value to society and the company through balance between revenue generation, social development, and the reduction of environmental impacts. Argos' Sustainability Strategy guides the entire organization through four principles of work:

- Relationships of trust: Relationships with stakeholders are based on mutual transparency and support They are nourished by constant dialogue and collective construction, which lead Company to achieve common goals.
- Responsible production: Argos uses resources responsibly, which means working every day to prevent, mitigate, correct and compensate impacts on its value chain.
- Business profitability: Decisions of Company are focused on the generation of innovative and efficient solutions to maximize the value generated to customers and business.
- Shared values with its partners: Transforming Argos future requires transforming Company present through individual actions. Argos contributes to empowering its stakeholders in their roles as agents of change.

This sustainability strategy is possible through positive relationships with stakeholders and following principles of good governance.

C0.2

**(C0.2) Indique las fechas de comienzo y fin del año sobre el que proporcionará información.**

	Fecha de comienzo	Fecha de fin	Indique si proporcionará datos de emisiones para reportes de años anteriores	Seleccione el número de informes de años anteriores para los que proporcionará datos de emisiones
Año de informe	enero 1 2019	diciembre 31 2019	Sí	1 año

C0.3

**(C0.3) Seleccione los países/áreas sobre los cuales divulgará información.**

- Colombia
- República Dominicana
- Guayana Francesa
- Haití
- Honduras
- Panamá
- Puerto Rico
- Surinam
- Estados Unidos de América

C0.4

**(C0.4) Seleccione la moneda utilizada para toda la información financiera divulgada en su respuesta.**

COP

C0.5

**(C0.5) Indique la opción que mejor describa el alcance de la divulgación de información dentro del cual se informan los impactos relacionados con el clima en su actividad comercial. Observe que esta opción debe estar alineada con el enfoque de consolidación de su inventario de GEI seleccionado.**

Control operacional

**(C-CE0.7) ¿En qué parte concreta de la cadena de valor del carbón opera su empresa?**

- Explotación de canteras de piedra caliza
- Producción de clínker
- Fabricación de cemento Portland
- Cemento adicionado
- Producción de materiales cementicios alternativos con 'bajo CO2'
- Producción de agregados
- Producción de hormigón

**C1. Gobernanza**

**C1.1**

**(C1.1) ¿Existe la supervisión de asuntos relacionados con el clima por parte de la junta directiva en su organización?**

Sí

**C1.1a**

**(C1.1a) Identifique el (los) puesto(s) (no incluya nombres) de la(s) persona(s) en la Junta Directiva que es (son) responsable(s) de los asuntos relacionados con el clima.**

Puesto de la/s persona/s	Explicación
Comité de nivel de Junta Directiva	The highest level of direct responsibility for climate change issues in the Company is in the Sustainability and Corporate Governance Committee, which belongs to the committees of the Board of Directors. This Committee is formed by three members of the Board of Directors: one of them is an expert in social and environmental topics and former Minister of Environment in Colombia; another one is a lawyer related with the details of the cement industry and has worked at Argos for more than 20 years; and the last one is an expert in technological and mining sector. This Committee's objective is to recommend to the Board of directors, systems for the adoption, follow-up and improvement of sustainability and corporate governance practices used within the Company. This committee meets quarterly and has among its functions the guidance, monitoring and tracking of best practices in sustainability, as well as ensuring compliance with the sustainability strategy.
Director de Sustentabilidad (CSO)	The Legal and Sustainability Vice Presidency goal is ensuring integrity, corporate governance, reputation and sustainability, while leading the legal and corporate affairs, communications and sustainability process, thus supporting the results of the regions.
Director de Operaciones (COO)	In the search of a more competitive and efficient organization, in 2019 Argos carried out a resizing of its corporate structure, going from nine vice-presidencies to a model of three regional vice-presidencies and three corporate vice-presidencies. With this structure, Argos is looking forward to strengthening competencies and promoting a larger autonomy for its operations. The operations are empowered to act quickly and more decisively within their markets, have agile administrative areas that work closely with the business, and develop Transversal Excellence Networks to facilitate the adoption of best practices and the creation of synergies between areas. The Central America and Caribbean (CCA) Vice Presidency is one of three Operating Office in Argos, together with the Vice Presidencies of the other two regions (Colombia and USA). The Central America and Caribbean (CCA) Vice Presidency as an Operating Office is responsible for implementing the region's competitive strategy, focusing on responding to the market in an agile way, to deliver a value proposition that satisfies customer needs, supported by an efficient operation to generate profitability. In a transversal way, through its Transversal Excellence Networks (TEN), this VP leads synergies in following issues: - Strategies and policies on environment, occupational health and safety, and community relations. Therefore, as Sponsor VP of Environmental TEN, this VP guides and supports topics under his responsibility and ensures that the objectives of the TEN are met. - Branding - Cement operations One Transversal Excellence Networks of this Operating Office is the Environmental Management Department, which is responsible for defining climate change strategy and ensuring its compliance. The implementation of the climate change strategy is leveraged by Regional VPs: Colombia, USA and Central America & Caribbean; with active participation of other VPs, such as: Legal and Sustainability, Finance, and Talent and Culture. The regional teams are then responsible for the reduction of the company's GHG emissions through the correct execution of strategies.
Otro. Especifique. (Steering committee )	In 2019, Argos adjusted the number of Steering Committee members from ten to seven. This change was made to have more proximity to customers, be more agile in the decision-making process, to empower regional branches and respond in a timely manner to current market challenges. The CEO and Vice Presidents meet formally every month, at the Steering Committee, to analyse the performance of the Company, evaluate new projects and to follow up ongoing projects. Likewise, Vice presidents of regional divisions attend a monthly committee along with the CEO. The main functions of the Steering Committee are: - Delivering the guidelines and validating the management of the company in relation to economic, social and environmental aspects. - Giving feedback and guiding employees for decision making. - Aligning and transmitting the recommendations received from the Board of Directors.

**C1.1b**

**(C1.1b) Proporcione más detalles sobre la supervisión de los asuntos relacionados con el clima por parte de la Junta Directiva.**

Frecuencia con la que los asuntos relacionados con el clima se incluyen en la agenda como un elemento planificado	Mecanismos de gobernanza en los que se integra a los asuntos relacionados con el clima	Alcance de la supervisión a nivel de la junta directiva	Explicación
Planificado - todas las reuniones	Revisión y orientación para la preparación de las estrategias Revisión y orientación para la preparación de los principales planes de acción Revisión y orientación para la preparación de las políticas de gestión de riesgos Definición de los objetivos de desempeño Monitoreo de la implementación y el desempeño de los objetivos Monitoreo y supervisión del avance contra las metas y los objetivos para abordar los problemas relacionados con el clima	<Not Applicable>	The Sustainability and Corporate Governance Committee meets quarterly and has the function of establishing, monitoring and tracking best practices in sustainability as well as ensuring the compliance of the sustainability and environmental strategies, which includes the company's climate change strategy. Some functions of this Committee are the following: Definition and monitoring of the Sustainability Strategy. Analysis of sustainability issues related to the strategic risks. Approval of the update of the materiality matrix. Monitoring of environmental indicators. Follow-up to the Compliance Program. Analysis of best corporate governance practices. Review of the results of the impact assessment. Monitoring the strategy and progress in fuels alternative.

**C1.2**

**(C1.2) Proporcione las posiciones o comités de gestión de más alto rango que tengan responsabilidad sobre asuntos relacionados con el clima.**

Nombre de las posiciones y/o comités	Línea jerárquica	Responsabilidad	Cobertura de responsabilidad	Frecuencia con la que informan a la Junta Directiva sobre asuntos relacionados con el clima
Otro. Especifique. (Board-level committee (Sustainability and Corporate Governance Committee))	<Not Applicable >	Tanto evaluar como gestionar los riesgos y oportunidades asociadas con el clima	<Not Applicable>	Trimestralmente
Otro. Especifique. (Steering Committee)	<Not Applicable >	Tanto evaluar como gestionar los riesgos y oportunidades asociadas con el clima	<Not Applicable>	Trimestralmente
Director de Sustentabilidad (CSO)	<Not Applicable >	Tanto evaluar como gestionar los riesgos y oportunidades asociadas con el clima	<Not Applicable>	Trimestralmente
Gerente de medio ambiente/sustentabilidad	<Not Applicable >	Tanto evaluar como gestionar los riesgos y oportunidades asociadas con el clima	<Not Applicable>	Trimestralmente
Director de Operaciones (COO)	<Not Applicable >	Tanto evaluar como gestionar los riesgos y oportunidades asociadas con el clima	<Not Applicable>	Trimestralmente
Gerente de riesgos	<Not Applicable >	Tanto evaluar como gestionar los riesgos y oportunidades asociadas con el clima	<Not Applicable>	Trimestralmente

**C1.2a**

**(C1.2a) Describa en qué parte de la estructura organizativa se encuentran estos puestos y/o comités, cuáles son las responsabilidades relacionadas y de qué manera se monitorean los asuntos relacionados con el clima (no incluya los nombres de las personas).**

The Corporate Government of Argos has the following hierarchy:

1. **Superior entity: General Shareholders' Assembly:** it is the highest corporate body and it is constituted by the company's shareholders.
2. **Board of Directors:** is appointed by the General Assembly of Shareholders for periods of three years from the proposals presented by the shareholders. The Board of Directors meets at least once a month according to with the defined action plan, which includes topics to be discussed that are framed in economic, environmental and social strategies that are strategic for the company. Among its functions are the following: - Guide and review the long-term strategy; - Follow-up on the main projects, budgets and the business plan; - Adopt the company policies in economic, social and environmental matters; - Formulate proposals and actions taking into account the best sustainability practices; - Keep track of strategic risks, the associated impacts and the corresponding prevention and mitigation plans; - Monitor the functioning of internal control mechanisms and their effectiveness for risk management.
- The **Sustainability and Corporate Governance Committee**, which belongs to the Board of Directors, has as objective to recommend to the Board of directors, systems for the adoption, follow-up and improvement of sustainability and corporate governance practices used within the Company. In this Committee, all environmental issues of interest to the company, and among them those related to the climate change, are treated and monitored. This Committee meets quarterly and has the function of establishing, monitoring and tracking best practices in sustainability as well as ensuring the compliance of the sustainability and environmental strategies, which includes the company's climate change strategy.
3. **Chairman.**
4. **Steering Committee:** brings experience and knowledge to face the challenges of the organization and ensure the generation of value to the stakeholders. It is made up by the CEO and the seven Vice Presidents that the company has. The Steering Committee meets every month to analyse the performance of the Company, evaluate new projects and to follow up ongoing projects. The main functions of the Steering Committee are: - Delivering the guidelines and validating the management of the company in relation to economic, social and environmental aspects; - Giving feedback and guiding employees for decision making; - Aligning and transmitting the recommendations received from the Board of Directors. The Legal & Sustainability Vice President and the Central America and Caribbean Vice President (as Sponsor VP of Environmental TEN – Transversal Excellence Net) participate in these committees ensuring that climate change issues are considered within the implementation of the company strategy.
5. **Legal & Sustainability Vice Presidency (Chief Sustainability Officer - CSO):** is responsible for formulating the sustainability strategy and ensuring that the guidelines of the Board permeate the organization.
6. **Central America and Caribbean Vice Presidency (Chief Operating Officer (COO):** as Sponsor VP of Environmental TEN (Transversal Excellence Net) this VP guides and supports topics under his responsibility, ensures that guidelines of Board permeate the organization and that the objectives of Environmental TEN team objectives are met.
7. **Environmental, Health & Safety Manager:** this Manager is under the Central America and Caribbean Vice Presidency in the corporate structure **and is** responsible for formulating and leading the implementation of the Climate Change Strategy, which focuses on the measurement of direct and indirect greenhouse gases (GHG), on the identification and development of mitigation measures for these emissions and on the definition of actions to adapt to impacts related with climate change. Some of the functions of the Environmental, Health, and Safety manager are the following: - Define and maintain updated and adjusted to reality, the strategy in environmental affairs while carrying out continuous monitoring of its implementation; - Advising and accompanying the environmental work plan of the organization; - Follow-up on the implementation of the environmental process in the organization; and - Lead and monitor the environmental process to ensure compliance with the environmental strategy, the applicable regulations and the improvement of environmental performance, promoting synergies between regions and other areas of the organization on issues related to the environmental strategy.
8. **Risk Manager:** this Manager is under Finance Vice Presidency in the corporate structure. He leads the climate change risk análisis; his team updates company climate change risk matrix yearly under IRMS guidelines, which allows prioritizing resources and action plans to support climate change management.

**C1.3**

**(C1.3) ¿Provee incentivos para la gestión de asuntos relacionados con el clima, incluido el cumplimiento de metas?**

	Se brindan incentivos para la gestión de asuntos relacionados con el clima	Comentario
Fila 1	Sí	Argos has a Variable Compensation System (monetary incentives) that promotes the achievement of the strategic targets. Through this system, extra salary bonuses are paid to employees when the goals are achieved. Depending on the organizational level within the company, there are two types of incentives that could apply: short term incentives and long-term incentives. Also, Argos has a system of non-monetary incentives to promote the generation of innovative ideas, which is named IDEAXION, an organizational tool for the innovation management that allows the collection of innovative ideas from anyone anywhere in the Company. In 2019 Argos integrated the management of the compensation system and IDEAXION program in order to promote savings achievements generated by improvements or changes in processes or products. Another program with non-monetary incentives is "sustainable mobility program", which highlights and promotes sustainable mobility

**C1.3a**

**(C1.3a) Proporcione más detalles sobre los incentivos que provee para la gestión de asuntos relacionados con el clima (no incluya los nombres de las personas).**

Tiene derecho a recibir el incentivo	Tipo de incentivo	Actividad incentivada	Comentario
Director Ejecutivo (CEO)	Recompensa monetaria	Proyecto de eficiencia	Argos has a Variable Compensation System (monetary incentives) that promotes the achievement of the strategic targets. Through this system, extra salary bonuses are paid to employees when the goals are achieved. Depending on the organizational level within the company, there are two types of incentives that could apply: short term incentives and long-term incentives. The short-term monetary incentive (annual) establishes targets which are evaluated and reviewed at the end of the established periods. The long-term monetary establishes follow-up, measurement and compliance with the goals for periods of 3 years; however, the planning, measurement and tracking of these indicators are carried out every year and the next three- year period is planned. This monetary incentive for the CEO is a long-term sustainability incentive, which focuses its management on commitments related to compliance with the sustainability strategy, emissions reduction and water consumption. Compliance of the goals defined, gives rise to the payment of monetary incentives, represented in shares of company. This incentive aims to generate awareness and management in favor of the company's sustainability by defining actions and initiatives on a day-to-day basis
Gerente de la unidad de negocios	Recompensa monetaria	Proyecto de eficiencia	Business unit managers of three regional operations have within their variable compensation program the long-term sustainability indicator focusing management on commitments related to compliance with the sustainability strategy, emissions reduction and water consumption. Additionally, Innovation Managers have other indicators associated with savings generated by improvement or changes in processes or products or substitution of raw materials or fuels in the different plants and headquarters.
Otro. Especifique. (Innovation Team employees)	Recompensa monetaria	Proyecto de eficiencia	Employees of the innovation area have several indicators (short term incentives) within their variable compensation program, such as: challenges associated with savings generated by improvements, changes in processes or products, substitution of raw materials or fuels in the different plants and headquarters, among others.
Todos los empleados	Recompensa no monetaria	Otro (especifique) (The implementation of innovative ideas that promotes efficiency in the processes and savings in emissions (GEI and other emissions), energy, water and all resources in general.)	Argos has a system of non-monetary incentives to promote generation of innovative ideas (named IDEAXION), which is an organizational tool for the innovation management that allows the collection of innovative ideas from anyone anywhere in the Company, and, it has a system of points assigned to reward authors and mentors of those innovative ideas. This initiative is part of the strategies aimed at the efficient use of resources, maximizing the profitability of businesses, expanding the portfolio of products and services with sustainability characteristics, adopting high quality standards and responding to the needs of the local markets.
Todos los empleados	Recompensa no monetaria	Otro (especifique) (Sustainable Mobility Program. )	Another program within non-monetary incentives is the "Sustainable Mobility Program", which highlights and promotes sustainable mobility through the following mechanisms: carpooling, walking more and using cleaner means of transport like electric bicycles provided by the company. Every month Argos publishes several piece of data on the use of the bikes, highlighting the person who has used them the most in that period, the CO2 emissions avoided due to their use, the increase in the use of bicycles, among other piece of data about practices to reduce personal carbon footprint.

**C2. Riesgos y Oportunidades**

**C2.1**

**(C2.1) ¿Su organización cuenta con un proceso para identificar, evaluar y responder a los riesgos y oportunidades relacionadas con el clima?**

Si

**C2.1a**

**(C2.1a) ¿Cómo define su organización horizontes temporales a corto, mediano y largo plazo?**

	Desde (años)	Hasta (años)	Comentario
Corto plazo	1	3	Argos evaluates its Value at Risk annually from strategic risk scenarios, quantifying the impact on the key indicators budgeted by the company, which are set according to the corporate strategy (e.g., net debt/EBITDA ratio). Additionally, facility and process risk assessments are performed yearly or biannually, in order to follow-up on action plans and identify further alerts.
Mediano plazo	4	6	Corporate guidelines such as the environmental strategy are currently set on milestones for 2025. Therefore, medium-term plans are designed on a five-year horizon, so they are aligned with the strategic KPIs.
Largo plazo	7	10	Long-term projects are evaluated on 10-year projections of earnings and cash flows. Decisions on financial feasibility are taken considering 10-year NPV results and internal rates of return, plus payback periods lesser of equal than 10 years. This is aligned to other criteria such as the Paris Agreement time horizon, the SDG agenda and the FICEM roadmaps.

**C2.1b**

## (C2.1b) ¿Cómo define su organización a un impacto estratégico o financiero sustancial en su empresa?

At Argos, all our actions are driven by our higher purpose, i.e., to build dreams that foster development and transform lives. Our roadmap for this is the corporate strategy, which is centered in creating stakeholder value through offering construction materials and services, leveraging solutions that drive the industrialization and digitalization of the sector, in countries in the Americas with high potential for construction and infrastructure development, based on streamlined, innovative and efficient management, with high sustainability standards under a recognized brand. The degree of achievement of the strategy and strategic objectives is measured through OKRs, which are reviewed and adjusted regularly, according to the constant changes in the environment and the medium and long-term challenges that may influence the industry and the company. Supporting and aligned to our main strategic framework, we count on sustainability and climate change strategies, for which goals and targets are set by year 2025.

Our Integrated Risk Management system provides the framework and methodology to identify, assess, quantify and monitor the risks that may affect the company's objectives at the strategic, tactical and operational levels. Strategic risks are defined according to the internal and external drivers that may affect achieving the company's strategic objectives and OKRs. The strategic risks' relevance is measured against the company's appetite and tolerance scales, which are set according to the potential deviation that a risk materialization may cause on OKRs related to financial flexibility. More specifically, we quantify the impact of strategic risks through the definition of risk scenarios and a Value-at-Risk approach, in which we evaluate losses in EBITDA and their effect on the company's net debt/EBITDA ratio (OKR for financial flexibility). The impact scale is then defined depending on whether the net debt/EBITDA ratio allows or not to keep financial flexibility, credit ratings, and the overall investment outlook of the company, according to the targets defined by the company.

Currently, Argos has identified eleven strategic risks: lower value generation due to the market situation (SR1); delay or inability to close competitive gaps in operating and administrative costs and expenses (SR2); inability to adapt to changes in the value chain of construction and our customers' needs (SR3); not achieving the financial flexibility required by the company (SR4); new policies or changes in regulation that affect business performance or the development of projects (SR5); stakeholder actions that negatively affect the company's operations or the development of projects (SR6); weak connection between the employees' contributions and the company's higher purpose (SR7); inability to achieve and maintain environmental standards (normative or voluntary) that ensure the management of environmental and social impacts of operations (SR8); occurrence of natural events that affect the continuity of key operations (SR9); adverse decisions that significantly impact the financial results and the reputation of the company (SR10); data breaches and disruptions in operations due to cyber-attacks, failures in information systems, among others (SR11).

For topics that affect the overall achievement of the company's strategic objectives, such a climate change, a standalone analysis is performed in which specific risks are formulated as the potential materialization of any of our strategic or emerging risks, either as specific scenarios or as the risk materialization as a whole. For instance, emerging regulations regarding carbon pricing are covered as specific cases our SR5, and restrictions on access to capital because of a stigmatization of the sector are analyzed as our ER1. As a result, we count on a climate change risk analysis in which seven risks are identified (as specific cases or as the strategic or emerging risk per se), evaluated, and their impact is quantified and characterized according to the corporate risk appetite and tolerance scales. As a result, we update our climate change risk matrix yearly under our SGIR framework, which allows prioritizing resources and action plans to support climate change management.

## C2.2

### (C2.2) Describa su(s) proceso(s) para identificar, evaluar y responder a los riesgos y oportunidades relacionadas con el clima.

#### Etapa(s) de la cadena de valor cubierta(s)

Operaciones directas

#### Proceso de gestión de riesgos

Integrado a un proceso de gestión de riesgos multidisciplinario para toda la empresa

#### Frecuencia de la evaluación

Más de una vez al año

#### Horizonte(s) temporal(es) cubierto(s)

Corto plazo

Mediano plazo

Largo plazo

#### Descripción del proceso

Argos' Integrated Risk Management System (IRMS) identifies and assesses risks either from a strategic point of view, for process and project management (tactical) or for assets and facilities (operational). Strategic (SR) and emerging risks (ER) may affect the achievement of the company's strategic objectives in the short and long term, respectively. Strategic risks are reviewed and updated according to Argos' strategy and strategic objectives and materiality analysis, the Trends and Connections analysis (i.e., Argos methodology to identify trends that may define strategic and emerging risks) and inputs from business experts in different geographies. In addition, Strategic and emerging risks are constantly reviewed by the Board of Directors through the Audit, Finance and Risk Committee. The climate change scenarios that relate to our strategic risks (SR) address delays on achieving efficiency gaps in cost management due to increases in energy prices (SR 2), current or new regulations and standards regarding carbon pricing and emission thresholds (SR 5), stakeholder action (SR6), non-compliance of environmental standards and regulations (SR8) and natural hazards derived from climate change (SR 9). At the tactical and operational levels, the company assesses potential risks from surpassing the limits set by the regulations or voluntary standards, as well as natural hazards that may affect each facility. In addition, the company monitors emerging risks (ER) regarding potential restrictions on access to capital (credit or investment) for the cement industry (ER 1) and increases in operational costs derived from water scarcity (ER2). The company assesses climate-change scenarios related to strategic and emerging risks by quantifying impacts of a potential risk materialization on strategic KPIs and KRIs such as EBITDA, FCF, net debt/EBITDA ratio and ROCE, measured as deviations of risk materializations from budgeted OKRs or long-term goals. These impacts are categorized according to our Integrated Risk Management System (IRMS) impact scales for strategic risks, which are set according to the company's risk appetite and tolerance frameworks. Argos' IRMS is based on the ISO 31000 and COSO Enterprise Risk Management and aligned with the company's model of Governance, Risk and Compliance (GRC). The IRMS sets the impact and likelihood scales to determine risk exposure and the risk heat map. More specifically, the IRMS sets the impact scales for both strategic and operational risks according to the corporate risk appetite and tolerance framework, or the yearly EBITDA of each facility, respectively. At the tactical and operational levels, the company identifies risks through risk workshops with process owners and climate change experts, and are evaluated through tools such as: end-to-end assessments to the environmental management processes, methodologies for measuring the facilities' exposure to weather events and potential losses associated to them (assets and facilities); and self-assessment tools to evaluate the facilities' level of compliance to regulatory and voluntary standards, as well as their level of maturity on climate change adaptation, e.g., their preparedness to climate-related events and emergencies or the existence of a climate change adaptation plan (operational). Climate change risk management is also a company-wide agenda in which all levels of the organization are actively involved. Strategic risk scenarios and their impacts on the company's KPIs and KRIs are periodically presented to the top management (e.g. the Audit, Finance and Risk Committee; Sustainability and Corporate Governance Committee, and the Country Managers) via quarterly reports, country-level reports or specific presentations, to enable decision-making at the corporate level. Decisions are implemented through measures such as risk transfer and retention, revision of strategic projects or definition of corporate goals. At the tactical and operational levels, risk assessments are carried out following the IRMS guidelines, which enable designing and implementing action plans. During risk workshops and assessments, responsible parties and deadlines for the action plans are assigned. The company counts on a Government, Risk and Compliance portal, i.e., a web tool that allows reporting on risk assessments and action plan status, enabling risk management by process owners and promoting the availability on risk assessment results for all users. The Corporate Risk teams monitors the tool's status and support process owners in reporting the action plans status and their approval once the plans are successfully carried out. Process for identifying, assessing and responding to climate-related opportunities: Argos' Climate Change Strategy is focused on reducing CO2 emissions while generating new

business opportunities through innovation in processes and products to ensure sustainability to the company and its stakeholders. Those opportunities enable the Company in its direct operations to increase operational efficiency and reduce operating costs. Opportunities are assessed through an integration of top-down and bottom-up approaches. The company defines its strategic priorities, which are evaluated and monitored by the Project Management Office (PMO) and the regional innovation and marketing teams. These priorities frame Argos' strategic and innovation projects. Facilities, on the other hand, identify opportunities via SWOT Analyses. Each component of the facility's SWOT matrix is assessed considering their feasibility and impact, and the most relevant are submitted to IDEAXION, a corporate platform which enables transmitting ideas to the regional innovation teams and the corporate PMO. A business case is developed for those which represent relevant business opportunities, which is evaluated and approved by the corporate Financial Planning department. Once opportunities have been identified and approved, special teams are formed to define and perform the project. Argos has identified the opportunities drivers with potential to generate substantive changes in the business operations, revenues or expenditures. They include: Increase use of alternative fuels & raw materials: Argos contributes to the circular economy through usage of waste in production processes, avoiding the disposal of waste and reducing net CO2 emissions. Increasing energy efficiency: minimize energy intensity of operations, with emphasis on stability of costs, quality and supply at reasonable risk, supporting production demands in a sustainable and innovative way. The pilot test at the Cartagena Plant for capturing CO2 emission using microalgae advanced satisfactorily, achieving two patents granted by the Superintendence of Industry and Commerce of Colombia.

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#### **Etapa(s) de la cadena de valor cubierta(s)**

Upstream

#### **Proceso de gestión de riesgos**

Integrado a un proceso de gestión de riesgos multidisciplinario para toda la empresa

#### **Frecuencia de la evaluación**

Anualmente

#### **Horizonte(s) temporal(es) cubierto(s)**

Corto plazo

#### **Descripción del proceso**

The process for identifying and assessing our climate-related risks is the same for any segment of our value chain (see question C2.2: direct operations). For upstream risks, we also follow the regulations and standards that define our due diligence procedures. Upstream climate change risks are associated to the delay or inability to close gaps in operating and administrative costs and expenses (SR2), natural hazards derived from climate change (SR 9) and increases in operational costs derived from water scarcity (ER2). For SR2, the Risk Management, Environmental Management and Operation Management teams design and quantify risk scenarios considering potential increases in energy costs (see question C2.3, climate change risk 4). For SR9, impacts from extreme weather events in property losses and business continuity are assessed with the Supply Chain department and third-party modelling (RMS-AIR) (see question C2.3, climate change risk 5). For ER2, the risk management and environmental management teams designed a valuation tool for long-term shifts in water costs (see question C2.3, climate change risk 6). The company monitors strategic risks (SR) through the definition of risk scenarios and their quantification via impacts of a potential risk materialization on strategic KPIs and KRIs such as EBITDA, FCF, net debt/EBITDA ratio and ROCE, measured as deviations of risk materializations from budgeted KPIs or targets. The results of these analysis are constantly reported to the top management to promote decision-making. In facilities, risk assessments following the IRMS guidelines are performed to identify potential impacts and design action plans regarding cost overruns caused by scarcity in energy resources (e.g., gas and alternative fuels) and strategic decisions regarding our property policy renovations. Climate change opportunities are identified, evaluated and managed under the same procedures for all segments of our value chain (see question C2.2: direct operations). For the specific case of upstream opportunities, we also count on teams in the regional divisions and operations which support the implementation and management of alternative materials and fuels. Argos has identified the opportunities drivers with potential to generate substantive changes in the business operations, revenues or expenditures. Among the main achievements in 2019, it is worth to mention: - Increased use of alternative fuels & raw materials: Argos contributes to the circular economy through usage of waste in production processes, which reduces the environmental impacts generated by the exploitation of non-renewable natural resources. For doing so, Argos has established collaborative links with authorities, companies and communities, providing a sustainable solution to the problem of inadequate waste disposal. In 2019 we continue to use alternative fuels at the plants in Roberta, Harleyville, Newberry (United States), Comayagua (Honduras), Cartagena and Rioclaro (Colombia), with a heat substitution amounting to 5.6 percent. We highlight that our plant in Harleyville achieved a substitution level of 27.2 percent, the highest level from an Argos plant in the last five years. - We are making progress in strengthening the alternative fuel supply chain in the three regional operations. In Colombia, we signed an agreement with the company Duramos to supply and dispose of 100 percent of the tyres of large mining companies, and with the organization Extractor Marialabaja for the supply of more than 20000 tonne/year of agro-industrial waste to be co-processed at the Cartagena Plant. - In Honduras, we signed an agreement with the Corporation Dinant to perform the co-processing of industrial waste generated in some of its production processes, whose characteristics prevent it from being recycled. - In the US, we reached the commissioning of a new alternative fuel reception and supply plant in Newberry, which increased heat substitution percentage from 2.4 percent to 5 percent in a year. These results are aligned with the environmental strategy of the organization and with the circular economy initiatives, by mitigating the environmental impacts associated with the disposal of waste and the reduction of non-renewable fossil fuels in our production processes.

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#### **Etapa(s) de la cadena de valor cubierta(s)**

Downstream

#### **Proceso de gestión de riesgos**

Integrado a un proceso de gestión de riesgos multidisciplinario para toda la empresa

#### **Frecuencia de la evaluación**

Anualmente

#### **Horizonte(s) temporal(es) cubierto(s)**

Corto plazo

#### **Descripción del proceso**

The process for identifying and assessing our climate-related risks is the same for any segment of our value chain (see question C2.2: direct operations). Downstream climate change risks are associated to the reliability of our distribution network, which may be impacted by extreme weather events (SR9). As mentioned before, SR9 is addressed through exposure valuation tools by third parties (AIR and RMS models), risk assessments at the facilities, self-assessment tools and supply chain modelling, among others. In addition, we analyze the impact of a decreased access to capital via stigmatization of the sector (ER1). For detailed information regarding these risks, please refer to question C2.3, risks 5 and 7. Downstream climate change opportunities enable the Company to offer value-added products to its customers. Those opportunities are identified, evaluated and managed under the same procedures for all segments of our value chain (see question C2.2: direct operations). For the specific case of downstream opportunities, we rely on the "Sustainable construction" pillar of the Environmental Strategy, for which we leverage life cycle management and develop products focused on solving constructive challenges with extraordinary solutions through innovation. Argos considers that Sustainable Construction is the intelligent practice of building cities and infrastructure that are durable, resilient and have a low environmental impact, and that contributes to the improvement of the quality of life. Our Research and Development (R&D) team develops projects to reduce CO2 emissions at various points in the value chain. Initiatives range from identifying new raw materials to launching new products, specifically with sustainability characteristics (like Low carbon Products). Teamwork across a variety of company areas is essential for scaling the laboratory's developments. Some initiatives to manage downstream climate change opportunities during 2019 include: In 2019 we earned around USD \$269 million in revenue from our products with sustainability characteristics (see question C2.4). At the Rioclaro Plant in Colombia, we are modifying the traditional cement production process and, by using thermally activated clays as raw material, we are decreasing the consumption of clinker in cement production. Featuring state-of-the-art cement manufacturing equipment, this new line provides Argos with greater flexibility and positions it as the first cement producing company in Colombia to offer its customers a broad portfolio of products, as well as the possibility to customize cements according to the requirements of their projects. Thus, we developed a new product named Green Cement, which decreases the use of clinker and therefore decreases emissions of CO2 up to 38% and of energy consumption up to 30%, compared to the

blended hydraulic cement production. In the Caribbean and Central America Region, more than 95,000 soluble bags or Smart Packs were used in concrete production, which avoided waste generation while maintaining the product's quality. We conducted the Life Cycle Analysis (LCA) of six products from the Rioclaro Plant, Colombia (with Quantis as consultant). We evaluated the environmental impacts generated, from the extraction of raw materials required for product manufacture (cradle) to the gate of the cement production plant. We obtained the environmental self-declaration of each tested product: Type I gray clinker, thermally activated clays, general-purpose cement and concrete cement (produced with and without thermally activated clays). We obtained two new patents that recognize our commitment to innovation as a factor of service, differentiation and competitiveness. One is related to sulfoaluminate cements in the USA region, our first patent in this country, and the other is for cement with high addition contents in the Colombia region.

## C2.2a

### (C2.2a) ¿Cuáles tipos de riesgo se tienen en cuenta en las evaluaciones de riesgos relacionados con el clima de su organización?

	Relevancia e inclusión	Explicación
Normas actuales	Relevante; siempre se incluye	The Environmental, Risk Management and Financial Planning teams developed a scenario analysis addressing a potential widening of the tax base on Colombia's current carbon tax (see question C2.3, risk 3). Carbon taxes (applicable to liquid fuels consumption) could be potentially increased in the future due to the widening of the tax base to coal consumption. The company performs sensitivity analyses for estimating the financial impacts of this scenario in the yearly EBITDA. These analyses are carried out by the corporate Risk Management, Environmental Management and Financial Planning teams, who define and quantify risk scenarios according to potential increases of current tax values, considering other countries' legislations such as Mexico and Argentina. Results are constantly monitored and escalated to the top management whenever potential and significant impacts may arise.
Normas emergentes	Relevante; siempre se incluye	For the Strategic Risk 5, namely "new policies or changes in regulation that affect business performance", the Environmental, Risk Management and Financial Planning teams quantify impacts from potential Emissions Trading Systems and increases in Nationally Determined Contributions (see question C2.3, risks 1 and 2). The company assesses strategic risks through the definition of risk scenarios and their quantification via impacts of a potential risk materialization on strategic OKRs and KRIs such as EBITDA, FCF, net debt/EBITDA ratio and ROCE, measured as deviations of risk materializations from budgeted OKRs or long-term goals. The results of these analysis are constantly reported to the top management to promote decision-making.
Tecnología	Relevante; siempre se incluye	As part of the BEST initiative (Building Efficiency and Sustainability for Tomorrow), Argos considers operational efficiency a key driver in mitigating climate-related impacts through the implementation of better and cleaner technologies and co-processing programs. The company constantly monitors risks regarding strategic efficiency projects and new technologies such as the usage of calcined clay and the digitalization of operating processes. The R&D and engineering teams are dedicated to seeking new pathways towards new technologies for better operational performance, reducing CO2 emissions.
Legal	Relevante; siempre se incluye	At the tactical and operational levels, tools such as facility risk assessments and self-assessment tools evaluate the facilities' risk exposure of not complying with their emissions goals, which are in line with Argos' voluntary commitments regarding CO2 emissions and the company's environmental strategy. These assessments are considered inputs for quantifying risk scenarios for monitoring the Strategic Risk 8, namely the inability to achieve and maintain environmental standards (normative or voluntary) that ensure the management of environmental and social impacts of operations. For quantifying the impacts of SR8 and the SR6, namely "opposition of stakeholders to the operation or development of company projects", risk scenarios assume temporary interruptions to the most critical facilities due to potential litigations or de facto opposition from stakeholders or activist movements. These interruptions cause production losses and cost overruns from activating alternative supply management plans, which are calculated by the company's supply chain models. The company monitors strategic risks (SR) through the definition of risk scenarios and their quantification via impacts of a potential risk materialization on strategic OKRs and KRIs such as EBITDA, FCF, net debt/EBITDA ratio and ROCE, measured as deviations of risk materializations from budgeted KPIs or targets. The results of these analysis are constantly reported to the top management to promote decision-making.
Mercado	Relevante; siempre se incluye	Market risks are part of the main challenges to the business strategy, either via loss of market share (SR1), increase in operational costs and expenses (SR2) or a potential inability to adapt to disruptive changes in the value chain (SR3). Market factors such as new substitute products or changes in consumer behavior are among the drivers of these risks. The company monitors strategic risks (SR) through the definition of risk scenarios and their quantification via impacts of a potential risk materialization on strategic OKRs and KRIs such as EBITDA, FCF, net debt/EBITDA ratio and ROCE, measured as deviations of risk materializations from budgeted KPIs or targets. The results of these analysis are constantly reported to the top management to promote decision-making. The company has developed the Sustainable Construction strategy, aiming to encourage products with sustainability characteristics (e.g., low carbon products), and products for achieving sustainable construction certifications such as LEED®, EDGE, among others. This strategy is led by the corporate Environmental Management team, which provides technical assistance to the facilities and the regional Marketing teams.
Reputación	Relevante; siempre se incluye	The Corporate Sustainability, Communications and Investor Relations teams constantly perform reputational risk assessments. They monitor media trends, stakeholder perceptions, among other sources, to identify the climate-change issues that may affect the company's reputation and tackle them accordingly, either via communication plans or by creating internal awareness of the company's current challenges. Impacts of reputational risks may have direct impacts on Argos' financial results via sales or share prices. Therefore, the Risk Management department considers all reputational risk alerts and analyses their potential impacts on financial performance. More specifically, the company addresses the decrease in capital availability (loans or investments) derived from stigmatization of the sector (Emerging Risk 1, see question 2.3 risk 7).
Físico agudo	Relevante; siempre se incluye	The company's operation is exposed to extreme weather events (e.g. Hurricanes in the US and the Caribbean), so an increased frequency and severity of these events is assessed and monitored at the strategic level (strategic risk 9). These events affect the continuity of key operations, which translates into operational losses, asset damage and increases in insurance policies. The corporate Risk Management and Insurance teams evaluate periodically the exposure of weather events of all facilities. In 2019, losses for all locations were estimated using the AIR and RMS models, which enables to make better informed risk transfer and retention decisions, as well as to better identify critical operations in order to prioritize climate change adaptation plans. The company also counts on hazard assessments developed by the Geosura platform, i.e., a tool that allows identifying the degree of severity for each facility facing different weather events. Interruptions caused by extreme weather events are also modelled using the company's supply chain methodology (see question 2.3, risk 5). In addition, at the operational level, the facilities' preparedness to extreme weather events (e.g. through climate change adaptation plans or asset inspections) is evaluated through risk assessments and self-assessment tools, from which action plans are designed and carried out. The company is prepared for weather events such as hurricanes and monitors the weather patterns to prevent any potential impact on the facilities and keep staff safe.
Físico crónico	Relevante; siempre se incluye	Risk exposure to chronic physical risk is assessed through tools such as the World Resources Institute's Aqueduct, the Water Risk Filter (WRF) and the Global Water Tool, which enables to prioritize facilities and implement water management plans and targets defined by the Environmental Strategy (see question 2.3, risk 6). In addition, the Corporate Environmental Management, Risk Management and Sustainability departments have developed a water risk assessment tool in which costs associated to water consumption are calculated considering the facilities' current water stress levels (WRF), potential future variations of water stress (Aqueduct), and future social costs of water consumption according to the Value Added Statement, i.e., Argos' model for monetizing externalities caused by the operation. Business-as-usual scenarios are compared with the water cost reduction generated by complying to the Environmental Strategy's water consumption reduction targets, in order to create awareness and fine-tune water management action plans.

## C2.3

### (C2.3) ¿Ha identificado algún riesgo inherente relacionado con el clima que pueda tener un impacto estratégico o financiero sustancial en su empresa?

Sí

## C2.3a

### (C2.3a) Proporcione detalles de los riesgos identificados que puedan tener un impacto estratégico o financiero sustancial en su empresa.

#### Identificador

Riesgo 1

#### ¿En qué parte de la cadena de valor tiene lugar el factor de riesgo?

Operaciones directas

## Tipo de riesgo y factor de riesgo principal relacionado con el clima

Normas emergentes	Mecanismos de fijación de precio del carbono
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### Impacto financiero potencial primario

Aumento de los costos directos

### Tipo de riesgo relacionado con el clima según la clasificación tradicional de los riesgos de la industria de servicios financieros

<Not Applicable>

### Descripción específica de la empresa

Increased carbon pricing costs due to changes to the nationally determined contributions (NDC) defined by international agreements. The COP21 conference set the commitment of countries to keeping the rise in global temperature below 2° Celsius compared to the pre-industrial age. Locally, this was reflected on the targets each country's set and committed to for their nationally determined contributions (NDCs). The implementation of these targets will involve taking measures for industries with an intensive use of fuels, energy and CO2 emissions, such as the cement industry. For instance, by year 2030 the USA committed to decreasing absolute emissions among 26% to 28%, while Colombia committed to decreasing them by 20% under a Business-As-Usual (trend) scenario. Similarly, several countries in the Caribbean and Central America committed to reducing their CO2 emissions, such as Honduras, which set a 15% target under the BAU by 2030. In fact, in October 2018 the last IPCC (Intergovernmental Panel on Climate Change) report sent an alert to the governments of the world to take immediate action and set much more ambitious goals to limit global warming to 1.5°C, given that current commitments will not keep the temperature within the expected range. Therefore, all countries comprising our geographical scope may increase their NDCs in the future and hence their demands to carbon-intensive industries to reduce their emissions. The main implications for Argos operations might be materialized through, for example, the implementation of economic instruments (taxes or CO2 trading markets) and incentives, as well as mandatory reporting and verification systems.

### Horizonte temporal

Mediano plazo

### Probabilidad

Más probable que improbable

### Magnitud del impacto

Medio-alto

### ¿Puede brindar una cifra de impacto financiero potencial?

Sí, un rango estimado

### Cifra de impacto financiero potencial (moneda)

<Not Applicable>

### Cifra de impacto financiero potencial - mínima (moneda)

1828350701

### Cifra de impacto financiero potencial - máxima (moneda)

84128480558

### Explicación de la cifra de impacto financiero

The company monitors strategic risks through the definition of risk scenarios and their quantification via impacts of a potential risk materialization on strategic KPIs and KRIs such as EBITDA, FCF, net debt/EBITDA ratio and ROCE, measured as deviations of risk materializations from budgeted OKRs or targets. We performed a scenario analysis considering the current NDCs defined by Colombia, the USA Honduras and Puerto Rico and calculated our emissions exceeding these thresholds. In addition, we defined potential carbon prices as a random variable under a range from existing Emissions Trading System (ETS) according to the information available on the International Carbon Action Partnership (ICAP). Under a Value-at-Risk approach, we performed Monte Carlo simulations for cost overruns keeping 2019 emission levels for each country included in the model and calculating the corresponding emissions thresholds and costs of potential traded permits. An additional random variable was defined to model a 50% chance that this scenario was materialized in each country (controlling for simultaneity). As a result, cost overruns from setting NDCs for our emissions could vary between USD 562 thousand (perc. 10) and 25.5 (perc. 95) million.

### Costo de la respuesta al riesgo

86220724649

### Descripción de la respuesta y explicación del cálculo del costo

In 2019, Argos implemented projects related to the company's climate change strategy to reduce CO2 emissions, which involved a total investment of USD COP 86.220.724.649 (USD 26.261.105,64). Some of these investments are also aimed to increase operational efficiency, hence it is not possible to isolate specific amounts destined to mitigate this risk: - We completed the commissioning of the artificial pozzolana production line (thermal activation of clays) and the new milling operation and blending stations at the Rio Claro Plant. The new formulation of Cement General Use with the addition of artificial pozzolan and limestone decreases specific CO2 emissions by 38% and thermal energy consumption by 30%, fulfilling performance and improving its durability conditions. - We increased the substitution of conventional fuels (coal and petcoke) with alternative fuels (tires, mixed industrial waste, RDF, used oils, biomass, etc.), achieving a 5.6% rate at company level. - Our Research and Development team (R&D) continued developing innovative and low carbon processes, products and solutions that allow reduce CO2 emissions at various stages of our value chain. - We achieved significant progress in the development of CO2 capture and transformation technology with microalgae, through the assembly at the Cartagena Plant. We increased the efficiency in capture by 1.2%, we reached an efficiency of conversion of biomass into biocrudo of 63% and a conversion efficiency of biofuel in biofuel of 70%. - Enhancements in operation and stability of kilns in various cement plants of Colombia Region, which has lead to obtain savings in thermal energy. - We implemented a performance plan on the kiln at Harleyville Cement Plant, focused on increasing productivity and reliability. - We continued using Fluorite as a mineralizing agent for clinker in the Piedras Azules cement plant in Honduras, obtaining better rates of specific heat consumption in clinker production. - We continued using alternative raw materials in cement and concrete operations. - Energy Star certification for the Harleyville, Newberry and Roberta plants in the USA region.

### Comentario

Monitoring and mitigation of this risk are integrated into the company's risk management system. Likewise, within the framework of the Environmental Strategy and the Energy Policy, Argos monitors and implements actions to reduce CO2 emissions, such as: CO2 inventory (scope 1, scope 2 and scope 3), CO2 reduction objectives, energy efficiency, use of alternative fuels and reduction of the clinker/cement ratio, as well as the increase in the efficiency of the value chain, among others. The company monitors strategic risks through the definition of risk scenarios and their quantification via impacts of a potential risk materialization on strategic KPIs and KRIs such as EBITDA, FCF, net debt/EBITDA ratio and ROCE, measured as deviations of risk materializations from budgeted KPIs or targets. For the Strategic Risk 5, namely "new policies or changes in regulation that affect business performance", risk scenarios were estimated addressing potential carbon pricing schemes in specific countries. These scenarios are constantly reported to the top management to promote decision-making. As part of the BEST initiative (Building Efficiency and Sustainability for Tomorrow), Argos considers that operational efficiency mitigates climate-related impacts through the implementation of better and cleaner technologies and co-processing programs. The company constantly monitors risks regarding strategic efficiency projects and new technologies such as the usage of calcined clay.

### Identificador

Riesgo 2

### ¿En qué parte de la cadena de valor tiene lugar el factor de riesgo?

Operaciones directas

### Tipo de riesgo y factor de riesgo principal relacionado con el clima

Normas emergentes	Mecanismos de fijación de precio del carbono
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### Impacto financiero potencial primario

Aumento de los costos directos

### Tipo de riesgo relacionado con el clima según la clasificación tradicional de los riesgos de la industria de servicios financieros

<Not Applicable>

### Descripción específica de la empresa

Implementation of Emission Trading Systems (ETS) in the countries where the company operates: CO2 market schemes will most likely be implemented over the next few years in the locations where Argos operates. More specifically, Colombia and the US are the countries where most of our carbon-intensive activities take place, and agendas on ETS are being currently carried out. According to the climate change management law passed in 2018, Colombia aims to implement a National Program of Greenhouse Gas Tradable Emission Quotas (PNCTE, by its acronym in Spanish). In addition, ETS are in force, under development or considered, in the states of California, Washington, Oregon, New Mexico, North Carolina, New York City, Virginia, New Jersey, Massachusetts, plus the Regional Greenhouse Gas Initiative (RGGI) and TCI (Transportation and Climate Initiative). An ETS being implemented implies a direct cost on our cement production, which is the most representative business in terms of CO2 emissions.

### Horizonte temporal

Mediano plazo

### Probabilidad

Probable

### Magnitud del impacto

Medio

### ¿Puede brindar una cifra de impacto financiero potencial?

Sí, un rango estimado

### Cifra de impacto financiero potencial (moneda)

<Not Applicable>

### Cifra de impacto financiero potencial - mínima (moneda)

307288757

### Cifra de impacto financiero potencial - máxima (moneda)

35955697

### Explicación de la cifra de impacto financiero

Currently Argos operates in regions where carbon market schemes (ETS) have not been implemented. However, those CO2 market schemes are likely to be implemented in the USA and Colombia. This scenario was updated considering two likely schemes to be implemented: the California ETS and the EU ETS. A Value-at-Risk approach was performed in which both scenarios were considered with their carbon price levels and their allowances, as well as the company's 2019 emission levels. A random variable was added to include the effect of non-simultaneity of the implementation of an ETS in the countries where we operate. An implementation of an ETS in our current conditions, may represent between USD 93 thousand (percentile 10) and 10.9 (percentile 95) million in additional costs.

### Costo de la respuesta al riesgo

86220724649

### Descripción de la respuesta y explicación del cálculo del costo

In 2019, Argos implemented projects related to the company's climate change strategy to reduce CO2 emissions, which involved a total investment of USD COP 86.220.724.649 (USD 26.261.105,64). Some of these investments are also aimed to increase operational efficiency, hence it is not possible to isolate specific amounts destined to mitigate this risk: - We completed the commissioning of the artificial pozzolana production line (thermal activation of clays) and the new milling operation and blending stations at the Rio Claro Plant. The new formulation of Cement General Use with the addition of artificial pozzolan and limestone decreases specific CO2 emissions by 38% and thermal energy consumption by 30%, fulfilling performance and improving its durability conditions. - We increased the substitution of conventional fuels (coal and petcoke) with alternative fuels (tires, mixed industrial waste, RDF, used oils, biomass, etc.), achieving a 5.6% rate at company level. - Our Research and Development team (R&D) continued developing innovative and low carbon processes, products and solutions that allow reduce CO2 emissions at various stages of our value chain. - We achieved significant progress in the development of CO2 capture and transformation technology with microalgae, through the assembly at the Cartagena Plant. We increased the efficiency in capture by 1.2%, we reached an efficiency of conversion of biomass into biocrudo of 63% and a conversion efficiency of biofuel in biofuel of 70%. - Enhancements in operation and stability of kilns in various cement plants of Colombia Region, which has lead to obtain savings in thermal energy. - We implemented a performance plan on the kiln at Harleyville Cement Plant, focused on increasing productivity and reliability. - We continued using Fluorite as a mineralizing agent for clinker in the Piedras Azules cement plant in Honduras, obtaining better rates of specific heat consumption in clinker production. - We continued using alternative raw materials in cement and concrete operations. - Energy Star certification for the Harleyville, Newberry and Roberta plants in the USA region.

### Comentario

Monitoring and mitigation of this risk are integrated into the company's risk management system. Likewise, within the framework of the Environmental Strategy and the Energy Policy, Argos monitors and implements actions to reduce CO2 emissions, such as: CO2 inventory (scope 1, scope 2 and scope 3), CO2 reduction objectives, energy efficiency, use of alternative fuels and reduction of the clinker/cement ratio, as well as the increase in the efficiency of the value chain, among others. The company monitors strategic risks through the definition of risk scenarios and their quantification via impacts of a potential risk materialization on strategic KPIs and KRIs such as EBITDA, FCF, net debt/EBITDA ratio and ROCE, measured as deviations of risk materializations from budgeted KPIs or targets. For the Strategic Risk 5, namely "new policies or changes in regulation that affect business performance", risk scenarios were estimated addressing potential carbon pricing schemes in specific countries. These scenarios are constantly reported to the top management to promote decision-making. As part of the BEST initiative (Building Efficiency and Sustainability for Tomorrow), Argos considers that operational efficiency mitigates climate-related impacts through the implementation of better and cleaner technologies and co-processing programs. The company constantly monitors risks regarding strategic efficiency projects and new technologies such as the usage of calcined clay.

### Identificador

Riesgo 3

### ¿En qué parte de la cadena de valor tiene lugar el factor de riesgo?

**Tipo de riesgo y factor de riesgo principal relacionado con el clima**

Normas actuales	Mecanismos de fijación de precio del carbono
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**Impacto financiero potencial primario**

Aumento de los costos directos

**Tipo de riesgo relacionado con el clima según la clasificación tradicional de los riesgos de la industria de servicios financieros**

&lt;Not Applicable&gt;

**Descripción específica de la empresa**

New or higher carbon taxes on emissions or fossil fuel consumption: Among Argos' operations, Colombia is currently the only country where a carbon tax has been implemented. In 2016, a tax reform in Colombia approved the carbon tax on consumption and imports of liquid fuels and natural gas (only for petrochemical industry). Currently, a public debate is taking place regarding a tax base widening towards coal which may amount to 41613 COP (12.67 USD under the 2019 exchange rate) per tonne of coal. This will have a direct financial implication on Argos' operational costs. The Risk Management and the Environmental Management teams constantly monitor emerging changes on carbon taxes in the countries where we operate, through platforms such as the International Carbon Action Partnership (ICAP) and the World Bank's carbon pricing dashboard

**Horizonte temporal**

Mediano plazo

**Probabilidad**

Probable

**Magnitud del impacto**

Bajo

**¿Puede brindar una cifra de impacto financiero potencial?**

Sí, un rango estimado

**Cifra de impacto financiero potencial (moneda)**

&lt;Not Applicable&gt;

**Cifra de impacto financiero potencial - mínima (moneda)**

21374688629

**Cifra de impacto financiero potencial - máxima (moneda)**

27129420320

**Explicación de la cifra de impacto financiero**

The company monitors strategic risks through the definition of risk scenarios and their quantification via impacts of a potential risk materialization on strategic KPIs and KRIs such as EBITDA, FCF, net debt/EBITDA ratio and ROCE, measured as deviations of risk materializations from budgeted KPIs or targets. For the Strategic Risk 5, namely "new policies or changes in regulation that affect business performance", risk scenarios were estimated addressing potential carbon pricing schemes in specific countries. These scenarios are constantly reported to the top management to promote decision-making. For the Strategic Risk 5, namely "new policies or changes in regulation that affect business performance", a risk scenario was developed addressing a potential widening of the tax base on Colombia's carbon tax. We took optimistic, likely and pessimistic references for potential carbon tax per tonne of coal consumed based on our 2019 production. Then we estimated the cost overruns attributable to increased carbon taxes and its impact on the consolidated EBITDA using Monte Carlo simulations. Results are expressed as potential deviations from the company's EBITDA for 2019.

**Costo de la respuesta al riesgo**

86220724649

**Descripción de la respuesta y explicación del cálculo del costo**

In 2019, Argos implemented projects related to the company's climate change strategy to reduce CO2 emissions, which involved a total investment of USD COP 86.220.724.649 (USD 26.261.105,64). Some of these investments are also aimed to increase operational efficiency, hence it is not possible to isolate specific amounts destined to mitigate this risk: - We completed the commissioning of the artificial pozzolana production line (thermal activation of clays) and the new milling operation and blending stations at the Rio Claro Plant. The new formulation of Cement General Use with the addition of artificial pozzolan and limestone decreases specific CO2 emissions by 38% and thermal energy consumption by 30%, fulfilling performance and improving its durability conditions. - We increased the substitution of conventional fuels (coal and petcoke) with alternative fuels (tires, mixed industrial waste, RDF, used oils, biomass, etc.), achieving a 5.6% rate at company level. - Our Research and Development team (R&D) continued developing innovative and low carbon processes, products and solutions that allow reduce CO2 emissions at various stages of our value chain. - We achieved significant progress in the development of CO2 capture and transformation technology with microalgae, through the assembly at the Cartagena Plant. We increased the efficiency in capture by 1.2%, we reached an efficiency of conversion of biomass into biocrudo of 63% and a conversion efficiency of biofuel in biofuel of 70%. - Enhancements in operation and stability of kilns in various cement plants of Colombia Region, which has led to obtain savings in thermal energy. - We implemented a performance plan on the kiln at Harleyville Cement Plant, focused on increasing productivity and reliability. - We continued using Fluorite as a mineralizing agent for clinker in the Piedras Azules cement plant in Honduras, obtaining better rates of specific heat consumption in clinker production. - We continued using alternative raw materials in cement and concrete operations. - Energy Star certification for the Harleyville, Newberry and Roberta plants in the USA region.

**Comentario**

Monitoring and mitigation of this risk are integrated into the company's risk management system. Likewise, within the framework of the Environmental Strategy and the Energy Policy, Argos monitors and implements actions to reduce CO2 emissions, such as: CO2 inventory (scope 1, scope 2 and scope 3), CO2 reduction objectives, energy efficiency, use of alternative fuels and reduction of the clinker/cement ratio, as well as the increase in the efficiency of the value chain, among others. The company monitors strategic risks through the definition of risk scenarios and their quantification via impacts of a potential risk materialization on strategic KPIs and KRIs such as EBITDA, FCF, net debt/EBITDA ratio and ROCE, measured as deviations of risk materializations from budgeted KPIs or targets. For the Strategic Risk 5, namely "new policies or changes in regulation that affect business performance", risk scenarios were estimated addressing potential carbon pricing schemes in specific countries. These scenarios are constantly reported to the top management to promote decision-making. As part of the BEST initiative (Building Efficiency and Sustainability for Tomorrow), Argos considers that operational efficiency mitigates climate-related impacts through the implementation of better and cleaner technologies and co-processing programs. The company constantly monitors risks regarding strategic efficiency projects and new technologies such as the usage of calcined clay.

**Identificador**

Riesgo 4

**¿En qué parte de la cadena de valor tiene lugar el factor de riesgo?**

Upstream

#### Tipo de riesgo y factor de riesgo principal relacionado con el clima

Mercado	Mayor costo de las materias primas
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#### Impacto financiero potencial primario

Aumento de los costos directos

#### Tipo de riesgo relacionado con el clima según la clasificación tradicional de los riesgos de la industria de servicios financieros

<Not Applicable>

#### Descripción específica de la empresa

Increase in energy prices from stressed energy markets and raw material scarcity: energy regulation in Colombia establishes penalties for excess electricity consumption during a scarcity period, i.e., a period in which energy sources are affected to the extent that market asymmetries must be corrected by a trading scheme. Despite counting on long-term contracts to reduce the volatility of electricity prices and the exposure during scarcity periods, the regulation establishes that any consumption beyond our energy consumption baseline is exposed to high and volatile energy market prices. The exposure increases if any damage occurs to our self-generation facilities, or if there is no gas to supply our self-generating capacity. This is directly associated to the delay or inability to close competitive gaps in operating and administrative costs and expenses, which is assessed at a strategic level (strategic risk- SR2)

#### Horizonte temporal

Corto plazo

#### Probabilidad

Virtualmente seguro

#### Magnitud del impacto

Medio-alto

#### ¿Puede brindar una cifra de impacto financiero potencial?

Sí, un rango estimado

#### Cifra de impacto financiero potencial (moneda)

<Not Applicable>

#### Cifra de impacto financiero potencial - mínima (moneda)

3544389989

#### Cifra de impacto financiero potencial - máxima (moneda)

62586267609

#### Explicación de la cifra de impacto financiero

We designed a scenario to address the potential impact of producing under an El Niño phenomenon with the same characteristics of the one set in 2015-2016, but with our current energy consumption levels and energy market conditions regarding price levels. Energy prices (regulated and non-regulated) were defined as random variables with variation ranges according to current price fluctuations, and prices under scarcity conditions were modeled emulating the variations presented during the scarcity period of 2015-2016. We also established what-if conditions regarding the damage of our self-generation facilities and gas scarcity, as well as catastrophic scenario in which we could not self-generate. Reported values correspond to the 5 percentile of an optimistic scenario (i.e., counting on full capacity of our self-generation facilities), and the 95% of the catastrophic scenario (not being able to generate during this period).

#### Costo de la respuesta al riesgo

105001129

#### Descripción de la respuesta y explicación del cálculo del costo

We have an Energy Policy that provides the guidelines to respond to the needs of our operations in terms of electricity and fuels. Through this we commit to minimize the energy intensity of our operations, with emphasis on the stability of costs, quality and supply at a reasonable risk. Regarding electricity consumption, different responses are structured depending on each country's profile. For instance, in Colombia and Panama, long-term variations of weather patterns affect water availability and hence the reliability on hydroelectric sources, which are these countries' main power providers. Mitigation actions include long-term contracts with fixed prices. In countries with diverse non-predominant energy markets, we study renewable and conventional generation projects to reliably cover the demand at a competitive price. For instance, in 2018 and together with Celsia, we started implementing a solar farm in Honduras that will supply up to 20 percent of the operation's demand. On the other hand, we optimized processes and avoided redundant energy consumption in our operations, thanks to the implementation of optimization strategies under the BEST model. We highlight the fuel inventory management at the Cartagena Plant, which allowed us to save up to 33 percent, compared to market prices. In the Caribbean and Colombia regional divisions, we have implemented the Optimization Levers in Heat and Electricity Consumption, which aim to make a more efficient management of our consumption from improvement projects that may or may not involve CAPEX. These levers are supported by a 3-year work plan and people in charge of delivery and KPI monitoring. The reported figure corresponds the project investments for reducing power consumption due to improvements in electrical efficiency in 2018. Additional 18 million COP were spent in studies, management plans and programs for optimizing energy consumption.

#### Comentario

The reported figure corresponds the project investments for reducing power consumption due to improvements in electrical efficiency.

#### Identificador

Riesgo 5

#### ¿En qué parte de la cadena de valor tiene lugar el factor de riesgo?

Operaciones directas

#### Tipo de riesgo y factor de riesgo principal relacionado con el clima

Físico agudo	Mayor gravedad y frecuencia de condiciones climáticas extremas, como ciclones e inundaciones
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#### Impacto financiero potencial primario

Disminución de los ingresos debido a la menor capacidad de producción

#### Tipo de riesgo relacionado con el clima según la clasificación tradicional de los riesgos de la industria de servicios financieros

<Not Applicable>

#### Descripción específica de la empresa

Effects on operations caused by extreme weather events (SR9): Argos operates in areas which are highly vulnerable to extreme weather events, such as hurricanes, floods

and storm surge. These risks foster the need to frequently monitor potential impacts from extreme weather events on our operations and design mitigation and adaptation strategies for all our facilities depending on their specific degree of vulnerability. Extreme weather events have an impact in the availability of our facilities, causing increases in logistical costs, decrease in revenues, higher insurance premiums, property damage costs, among others.

**Horizonte temporal**

Corto plazo

**Probabilidad**

Probable

**Magnitud del impacto**

Medio

**¿Puede brindar una cifra de impacto financiero potencial?**

Sí, un estimado de una única cifra

**Cifra de impacto financiero potencial (moneda)**

62023139809

**Cifra de impacto financiero potencial - mínima (moneda)**

<Not Applicable>

**Cifra de impacto financiero potencial - máxima (moneda)**

<Not Applicable>

**Explicación de la cifra de impacto financiero**

Argos estimates financial impacts of extreme weather events via costs of interrupting operations in key facilities (e.g., logistical, loss of earnings), and potential property damage losses affecting insurance premiums. In 2019 the value on annual losses from property damage were updated. Losses for all locations were estimated using the AIR Touchstone and Risk Management Solutions (RMS) models, which enabled us to make better informed risk transfer and retention decisions, as well as to better identify critical operations in order to prioritize climate change adaptation plans. Results for all our facilities account for approximately 19 million USD. Estimations are used internally for decision-making.

**Costo de la respuesta al riesgo**

44087268918

**Descripción de la respuesta y explicación del cálculo del costo**

The potential impacts enable Argos implementing early actions aimed at optimizing the logistics chain in order to reduce the magnitude of potential impacts as well as to reduce our exposure to increased insurance premium costs. Reported management costs comprise the global corporate property policy premium for 2020-2021. The policy covers losses from property damage and business interruption for natural events in which earthquakes are also included.

**Comentario**

The company evaluates periodically the exposure of weather events of all facilities, relying on methodologies such as the AIR and RMS models and our supply chain modelling, which enables to make better informed risk transfer and retention decisions as part of our corporate insurance program, as well as to better identify critical operations in order to prioritize climate change adaptation plans. In addition, at the operational level, the facilities' degree of readiness to extreme weather events (e.g. through climate change adaptation plans and asset inspections) is evaluated through risk assessments and self-assessment tools, from which action plans and emergency plans are designed and carried out.

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**Identificador**

Riesgo 6

**¿En qué parte de la cadena de valor tiene lugar el factor de riesgo?**

Operaciones directas

**Tipo de riesgo y factor de riesgo principal relacionado con el clima**

Físico crónico	Cambios en los patrones de precipitación y variabilidad extrema en los patrones climáticos
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**Impacto financiero potencial primario**

Aumento de los costos directos

**Tipo de riesgo relacionado con el clima según la clasificación tradicional de los riesgos de la industria de servicios financieros**

<Not Applicable>

**Descripción específica de la empresa**

Depletion of water resources for the continuity of the operation due to climate change and environmental deterioration (emerging risk 2): as a consequence of environmental deterioration, climate change and climate variability, exposure to changes in the amount of water that can affect direct operations is increased, restricting water access for the facilities and their surrounding communities. This may permanently and continuously increase operational costs for each facility regarding energy consumption, production, and water management.

**Horizonte temporal**

Largo plazo

**Probabilidad**

Igualmente probable e improbable

**Magnitud del impacto**

Bajo

**¿Puede brindar una cifra de impacto financiero potencial?**

Sí, un rango estimado

**Cifra de impacto financiero potencial (moneda)**

<Not Applicable>

**Cifra de impacto financiero potencial - mínima (moneda)**

4322109574

**Cifra de impacto financiero potencial - máxima (moneda)**

**Explicación de la cifra de impacto financiero**

Risk exposure to chronic physical risk is assessed through the WRI's Aqueduct and the Water Risk Filter (WRF) Tools, which enable to prioritize and implement water management plans and targets defined by the Environmental Strategy. We developed a water risk assessment tool for forecasting annual costs associated to water consumption, considering the facilities' current stress levels (WRF), potential variations of water stress (Aqueduct), and future social costs of water consumption according to the Value Added Statement, i.e., Argos' model for monetizing externalities. Reported financial impact corresponds to the difference between the annual water consumption costs under a business-as-usual scenario and the one resulting when projected increases in water stress are taken into account. Random variables for this scenario are: water consumption levels, water costs per cubic meter and water stress levels for locations that may present significant water stress levels increases in a 10-year span. Aggregated cost overruns for all cement plants amount between USD 1,3 (percentile 5) and 1,6 million USD (percentile 95).

**Costo de la respuesta al riesgo**

5166452690

**Descripción de la respuesta y explicación del cálculo del costo**

Reported figure comprise actions related to the formulation and implementation of water management plans and quantification of water flows. These investment amount to USD 1,573,598 (COP 5.166.452.690) and comprise actions such as preparing studies, plans and programs, monitoring, operation and maintenance of control and disposal systems, legal matters and training. As this is a company-wide figure, it appears higher than the plant-specific and long-term costs.

**Comentario**

The company counts on an Environmental strategy with emphasis on water risk management, which includes prospective analyses through the Global Water Tool, Aqueduct and the Water Risk Filter. Reductions in water consumption are expected to be achieved via technological renewal, operational efficiency projects and quantification of water flows toward direct operations

**Identificador**

Riesgo 7

**¿En qué parte de la cadena de valor tiene lugar el factor de riesgo?**

Downstream

**Tipo de riesgo y factor de riesgo principal relacionado con el clima**

Reputación	Estigmatización del sector
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**Impacto financiero potencial primario**

Disminución del acceso al capital

**Tipo de riesgo relacionado con el clima según la clasificación tradicional de los riesgos de la industria de servicios financieros**

&lt;Not Applicable&gt;

**Descripción específica de la empresa**

Restrictions on access to capital as it is an intensive process in CO2 emissions (emerging risk 1): difficulty or cost overruns to obtain different sources to access financial capital (e.g., bonds, local bank debt, issuance of shares, green credits) or investors, due to higher scrutiny and loss of interest from financial capital providers towards carbon-intensive industries. This risk might be also materialized via changes in credit ratings motivated by ESG (environmental, social and governance) criteria and cost overruns due to increased interest rates from funding sources. As this is an emerging risk identified by the company, it is monitored, analyzed and managed by the teams involved on a regular basis.

**Horizonte temporal**

Largo plazo

**Probabilidad**

Igualmente probable e improbable

**Magnitud del impacto**

Bajo

**¿Puede brindar una cifra de impacto financiero potencial?**

Sí, un estimado de una única cifra

**Cifra de impacto financiero potencial (moneda)**

882000

**Cifra de impacto financiero potencial - mínima (moneda)**

&lt;Not Applicable&gt;

**Cifra de impacto financiero potencial - máxima (moneda)**

&lt;Not Applicable&gt;

**Explicación de la cifra de impacto financiero**

Financial impacts from reputational risk may be materialized via decreases in share price and the company's market value. We estimate that a reputational event related to ESG criteria may have an impact of around 882 million COP during the first month after its occurrence, taking into account reputational cases from similar companies on their market capitalization.

**Costo de la respuesta al riesgo**

1092097426

**Descripción de la respuesta y explicación del cálculo del costo**

Among the different actions performed by teams are the Crisis Management Manual, Sustainability Talks with stakeholders, internal and external communication campaigns and the annual reporting. The reported figure corresponds to the personnel and administrative costs of the corporate Sustainability Direction in 2019, which is in charge of most initiatives regarding sustainability reporting, valuation, communication and awareness.

**Comentario**

Argos superior purpose guides the Corporate Strategy and its five Strategic Objectives. One of them is the creation of Sustainable value that drives Argos to be profitable & grow to share value in the 3 ESG dimensions. This commitment begins in the executive directors and goes through all employees which base all their decisions on the four Sustainability strategy's principles: build trusted relationships with all our stakeholders, produce responsibly, ensure profitability of the business, and share values with our partners. For the Development, management and measurement of the sustainability strategy's impacts, Argos has defined a corporate structure that allow sustainability to be the main objective for the company and innovation to be the main mechanism used to reach the improvement needed in the business model to answer both the local

markets' needs and the world's needs, as it is the reduction and adaptation to climate change. This is the reason why there is an exclusive team dedicated to strengthening the environmental performance and guarantee compliance with the goals established in the environmental strategy in the three regionals of the company and at each country. In addition, The Corporate Sustainability, Communications and Investor Relations teams constantly perform reputational risk assessments. They monitor media trends, stakeholder perceptions, among other sources, to identify the climate-change issues that may affect the company's reputation and tackle them accordingly, either via communication plans, or by creating internal and external awareness of the company's current challenges. The commitment with sustainability has allowed Argos to be recognized by international indexes as the Dow Jones Sustainability index, Vigeo Eiris ranking and FTSE4Good index, among others, as a company with strong Environmental, Social and Governance performance and practices (including Climate Change management) and that allows Argos' shareholders, new investors and financial entities to keep interest on the company and trust in our businesses.

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## C2.4

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**(C2.4) ¿Ha identificado alguna oportunidad relacionada con el clima que pueda tener un impacto estratégico o financiero sustancial en su empresa?**

Si

### C2.4a

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**(C2.4a) Proporcione detalles de las oportunidades identificadas que puedan tener un impacto estratégico o financiero sustancial en su empresa.**

**Identificador**

Op1

**¿En qué parte de la cadena de valor tiene lugar la oportunidad?**

Operaciones directas

**Tipo de oportunidad**

Eficiencia de recursos

**Principal causante de la oportunidad relacionada con el clima**

Uso de proceso de producción y distribución más eficientes

**Impacto financiero potencial primario**

Disminución de los costos directos

**Descripción específica de la empresa**

Lower operational costs through more efficient processes: it is possible to have a positive impact on profits through operational efficiency directed to reduce scope 1 and scope 2 CO2 emissions. This can be achieved through the development of projects complying to Argos' climate strategy drivers, e.g., optimize thermal and electric energy consumption, use of alternative fuels and reduce clinker cement ratio.

**Horizonte temporal**

Corto plazo

**Probabilidad**

Virtualmente seguro

**Magnitud del impacto**

Media

**¿Puede brindar una cifra de impacto financiero potencial?**

Sí, un estimado de una única cifra

**Cifra de impacto financiero potencial (moneda)**

49576471000

**Cifra de impacto financiero potencial - mínima (moneda)**

<Not Applicable>

**Cifra de impacto financiero potencial - máxima (moneda)**

<Not Applicable>

**Explicación de la cifra de impacto financiero**

Reported figures correspond to expected annual savings by implementing energy efficiencies (thermal and electric) and projects related to substituting conventional by alternative fuels. These savings will be generated by achieving the 2025 energy policy goals and the alternative fuels roadmap, e.g., decreasing heat consumption by 10 percent and electricity consumption by 15 percent, plus to substitute conventional with alternative fuels by 18%.

**Costo para realizar la oportunidad**

25937359000

**Estrategia para realizar la oportunidad y explicación del cálculo del costo**

Through its Energy Policy and the alternative fuels roadmap, Argos has established specific targets to reduce the consumption of heat and electricity, and to increase the use of alternative fuels, in order to drive the company's competitiveness and minimize risks. It is expected that by 2025 the company will reduce its heat consumption by 10% and electricity consumption by 15%, taking 2012 as the base year. Likewise, it is expected that by 2025 the company will achieve a rate of 18% in alternative fuels use.

**Comentario**

The management cost of this opportunity is budgeted every year and it depends on the initiatives and projects to develop. In addition, Argos counts on teams in each region in charge of managing issues related to each of the identified opportunities, e.g., R&D, energy, environmental and alternative resources management, among others.

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**Identificador**

Op2

**¿En qué parte de la cadena de valor tiene lugar la oportunidad?**

Downstream

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**Tipo de oportunidad**

Resiliencia

**Principal causante de la oportunidad relacionada con el clima**

Otro. Especifique. (Development of climate adaptation, resilience and insurance risk solutions)

**Impacto financiero potencial primario**

Aumento de los ingresos debido a la mayor demanda de productos y servicios

**Descripción específica de la empresa**

The increased market opportunities via products with resilience characteristics: with the increasing likelihood of more intense extreme weather events that may cause natural disasters, Argos sees the importance in developing products with sustainability characteristics that help to create infrastructures that better adapt to the changing conditions. Therefore, concrete will be a fundamental element in the development of resilient structures. For example, Argos offers a special concrete with higher solar reflectance, which minimizes heat absorption. In addition, the company offers products that allow greater infiltration rate, so it reduces the intensity of damage caused by floods.

**Horizonte temporal**

Corto plazo

**Probabilidad**

Muy probable

**Magnitud del impacto**

Medio-alto

**¿Puede brindar una cifra de impacto financiero potencial?**

Sí, un estimado de una única cifra

**Cifra de impacto financiero potencial (moneda)**

81121418509

**Cifra de impacto financiero potencial - mínima (moneda)**

<Not Applicable>

**Cifra de impacto financiero potencial - máxima (moneda)**

<Not Applicable>

**Explicación de la cifra de impacto financiero**

Argos has designed products as a solution to mitigate the negative environmental impacts and to promote the adaptation to climate change, through characteristics such as better infiltration rate, heat island reduction, among others. Reported figures correspond to the annual income by products with resilience features such as: draincrete, colored concrete, and concrete with special durability and resistance characteristics

**Costo para realizar la oportunidad**

833807240

**Estrategia para realizar la oportunidad y explicación del cálculo del costo**

Reported annual costs correspond to R&D projects for developing products with sustainability characteristics, such as: resilience, low-carbon products, avoided emissions products, among others. Through the Sustainable Construction line of work of Argos' Environmental Strategy, we leverage life-cycle thinking and work to be agents of change and to influence other stakeholders so that this movement grows. Through innovation, we develop specialized cements and concretes, to solve constructive challenges with extraordinary solutions. We work with customers to bring our best proposal to each of their projects and accompany the appropriate solution to solve their needs. Argos has identified smart characteristics in its products, with the potential to generate significant positive environmental impacts and as an adaptation to climate change developing them in every region it is located, these include strategies as: market monitoring, benchmarking with other companies in the industry, and market intelligence to identify business opportunities for Argos products. The main approach is to improve the capacity to satisfy new market needs (products and services) related to climate change and to develop them in every region where Argos is located.

**Comentario**

Our Research and Development (R&D) team develops projects to reduce CO2 emissions at various points in the value chain. Initiatives range from identifying new raw materials to launching new products, specifically with sustainability characteristics (i.e. products with resilience characteristics). Teamwork across a variety of company areas is essential for scaling the laboratory's developments.

**Identificador**

Op3

**¿En qué parte de la cadena de valor tiene lugar la oportunidad?**

Downstream

**Tipo de oportunidad**

Productos y servicios

**Principal causante de la oportunidad relacionada con el clima**

Desarrollo de nuevos productos y servicios mediante investigación y desarrollo e innovación

**Impacto financiero potencial primario**

Aumento de los ingresos debido a la mayor demanda de productos y servicios

**Descripción específica de la empresa**

Increased market opportunities via low-carbon products: climate change enables changes in consumer behavior, who demand more products with better environmental performance and low carbon products (products with low embedded emissions). Low-carbon products help customers obtaining sustainable construction certifications, which is an emerging need from the market. The company should respond to changes in consumption patterns, in order to diversify income sources and to maintain market shares in the long term.

**Horizonte temporal**

Corto plazo

**Probabilidad**

Muy probable

**Magnitud del impacto**

Alto

**¿Puede brindar una cifra de impacto financiero potencial?**

Sí, un estimado de una única cifra

**Cifra de impacto financiero potencial (moneda)**

873085398109

**Cifra de impacto financiero potencial - mínima (moneda)**

<Not Applicable>

**Cifra de impacto financiero potencial - máxima (moneda)**

<Not Applicable>

**Explicación de la cifra de impacto financiero**

The financial implications of changes in consumer behavior due to the climate change are related to the revenues from sales of products that contribute to climate change mitigation (e.g., low carbon products), which represent 18% of revenues of total revenues in 2019.

**Costo para realizar la oportunidad**

833807240

**Estrategia para realizar la oportunidad y explicación del cálculo del costo**

Reported annual costs correspond to R&D projects for developing products with sustainability characteristics, such as: resilience, low-carbon products, avoided emissions products, among others. Through the Sustainable Construction line of work of Argos' Environmental Strategy, we leverage life-cycle thinking and work to be agents of change and to influence other stakeholders so that this movement grows. Through innovation, we develop specialized cements and concretes, to solve constructive challenges with extraordinary solutions. We work with customers to bring our best proposal to each of their projects and accompany the appropriate solution to solve their needs. Argos has identified smart characteristics in its products, with the potential to generate significant positive environmental impacts and as an adaptation to climate change developing them in every region it is located, these include strategies as: market monitoring, benchmarking with other companies in the industry, and market intelligence to identify business opportunities for Argos products. The main approach is to improve the capacity to satisfy new market needs (products and services) related to climate change and to develop them in every region where Argos is located. This, in addition to communicating how the product portfolio contributes to sustainable construction certification systems, such as LEED®, has opened up new market opportunities.

**Comentario**

Our Research and Development (R&D) team develops projects to reduce CO2 emissions at various points in the value chain. Initiatives range from identifying new raw materials to launching new products, specifically with sustainability characteristics (i.e. products with resilience characteristics). Teamwork across a variety of company areas is essential for scaling the laboratory's developments. Some initiatives to manage climate change opportunities during 2019 include: At the Rioclaro Plant in Colombia, we are modifying the traditional cement production process and, by using thermally activated clays as raw material, we are decreasing the consumption of clinker in cement production. Featuring state-of-the-art cement manufacturing equipment, this new line provides Argos with greater flexibility and positions it as the first cement producing company in Colombia to offer its customers a broad portfolio of products, as well as the possibility to customize cements according to the requirements of their projects. Thus, we developed a new product named Green Cement, which decreases the use of clinker and therefore decreases emissions of CO2 up to 38% and of energy consumption up to 30%, compared to the blended hydraulic cement production. In consultation with Quantis, we conducted the Life Cycle Analysis (LCA) of six products from the Rioclaro Plant, Colombia. We evaluated the environmental impacts generated, from the extraction of raw materials required for product manufacture (cradle) to the gate of the cement production plant. We obtained the environmental self-declaration of each tested product: Type I gray clinker, thermally activated clays, general-purpose cement and concrete cement (produced with and without thermally activated clays). We obtained two new patents that recognize our commitment to innovation as a factor of service, differentiation and competitiveness. One is related to sulfoaluminate cements in the USA region, our first patent in this country, and the other is for cement with high addition contents in the Colombia region

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**C3. Estrategia de negocio**

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**C3.1**

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**(C3.1) ¿Los riesgos y oportunidades relacionadas con el clima han influido en la estrategia y/o planificación financiera de su organización?**

Sí

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**C3.1a**

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**(C3.1a) ¿Su organización utiliza análisis de escenarios relacionados con el clima para dar forma a su estrategia?**

Sí, cualitativa y cuantitativa

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**C3.1b**

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**(C3.1b) Proporcione detalles acerca del uso de análisis de escenarios relacionados con el clima por parte de su organización.**

Modelos y escenarios relacionados con el clima aplicados	Detalles
Otro. Especifique. (Target Scenario analysis)	<p>Argos' climate change strategy established as target to achieve 544 kg net CO2/ t cementitious product by 2025, which is equivalent to reduce 25% with respect to 2006 baseline. This reduction target was established using scenario analysis, which allowed an understanding of how the Company can perform in terms of CO2 emissions under different operating conditions &amp; market processes. Climate-related scenarios that were used by Argos to establish its CO2 target have the following features: Parameters: Boundaries &amp; time horizon: the scenarios cover all the cement operations of the Company &amp; were developed for the year 2025. The CO2 emissions scope 1 were modeled. Methodology: Methodology used was "The Cement CO2 &amp; Energy Protocol (WBCSD-CSI,2011)"( <a href="https://bit.ly/1SmzAjU">https://bit.ly/1SmzAjU</a>). Scenarios were developed for each cement plant &amp; later they were consolidated in a final scenario that enabled the estimation of CO2 emissions at Regional &amp; Company level. Inputs: - Historical information, from 2006 to 2016, reported to Getting the Numbers Right. - Forecast of clinker &amp; cement production. - Forecast of types of cementitious products to be sold in the future. - Strategic projects: i.e. calcined clays. - Forecast of the performance of levers for reduction of CO2 emissions in clinkerization kilns: specific heat consumption, clinker cement ratio, use of alternative fuels, fuel mix for the kiln. - Data sources: Master Plan of the Company, Argos Energy Policy, CSI Roadmap (2009), forecast made by the Company's Alternative &amp; Strategic Resources teams. Analytical methods: Analysis were made under conservative, intermediate &amp; optimistic scenarios, in terms of the implementation level of projects that allow to reduce CO2. Argos' CO2 target, obtained through scenario analysis, has been compared with the CO2 indices projected by technical studies that consider climate related scenario &amp; that are publicly available: - Technology Roadmap-Cement Industry (WBCSD/CSI-IEA,2018): uses 2DS scenario (<a href="https://bit.ly/2IOX5Jg">https://bit.ly/2IOX5Jg</a>). - SDA Tool V.8.11 SBTi (IEA,2016); SBTi Tool V1.1 (IEA,2017): applies the Science Based Target (SBT) criteria and the 2DS scenario (<a href="https://goo.gl/s4Dc7W">https://goo.gl/s4Dc7W</a>). -Building Pressure (CDP,2018): It was a CDP's sector research for investors that provided for 2018 the most comprehensive climate &amp; water related data &amp; analysis on the market. It established that "Argos has the best emissions reduction targets which requires the highest annual emissions intensity reduction &amp; is currently performing best relative to this". Likewise, this study stated that "Using the SBTi methodology as a basis, Cementos Argos is deemed to have the best emissions reduction target..." (<a href="https://goo.gl/VL44sF">https://goo.gl/VL44sF</a>) Assumptions made: - CO2 reduction from CCS is excluded. - Clinker produced is consumed for the cementitious production onsite (clinker sold &amp; transferred are equal to zero). - Default values established in methodology B1 of the CSI CO2 Protocol were used. Results &amp; analyzes: By comparing Argos' CO2 target with targets set for the cement sector by the referenced studies, it was concluded that Argos target is challenging &amp; draw a pathway towards a low carbon economy, through mitigation of the risks to which Argos is exposed (transitions and physical risks) &amp; taking advantage of the opportunities derived by climate change. As always, Argos is permanently re-evaluating its targets, to keep up with climate change increasingly demanding risks. Monitoring procedures: CO2 target is monitored monthly in each cement plant. Gaps are analyzed &amp; action plans are established. Likewise, the Company's target is monitored continuously. Communication &amp; report: CO2 target has been shared with the Board of Directors, the Executive Committee &amp; with Senior Managers of production plants. It was also published to Argos' stakeholders (internal &amp; external) in the Annual Integrated Report and on web page. It is continually deployed in the Company through internal online training tool (EDUCA).</p>

**C3.1d**

**(C3.1d) Describa dónde y cómo han influido en su estrategia los riesgos y oportunidades relacionadas con el clima.**

	¿Los riesgos y oportunidades relacionadas con el clima han influido en su estrategia en esta área?	Descripción de la influencia
Productos y servicios	Sí	Changes in consumer demand patterns create the necessity to develop more sustainable products. Through the sustainable construction strategy, we respond to a changing world through innovation, opening new business opportunities and increasing revenues from to products with sustainability characteristics. This added to the communication of how the product portfolio contributes to sustainable construction certification systems has opened up new market opportunities for us. In 2019, we obtained revenues of more than USD \$ 269.1 million from products with sustainability characteristics. Also, we have established the contribution of the Argos portfolio products from the three regions to sustainable construction certifications such as LEED®, BREEAM® and Green Globes.
Cadena de suministro y/o cadena de valor	Sí	Climate change risks such as extreme weather events impact the availability of facilities, suppliers or our distribution chain, causing increases in logistical costs, decrease in revenues, higher insurance premiums, property damage costs, among others. For instance, ready mix production in the US decreased by 6.2 percent in 2017, partly explained by the extreme weather season with Hurricanes Harvey and Irma, which were considered the most severe in the history of the U.S. Though our assets were not severely damaged, the effect for the economies in the impacted regions was important and needs for reconstruction were considerable. Potential costs of extreme weather events are disclosed in question 2.3a, Risk 5. The company evaluates periodically the exposure of weather events of all facilities. In 2019, losses for all locations were estimated using the AIR and RMS models, which enables to make better informed risk transfer and retention decisions as part of our corporate insurance program, as well as to better identify critical operations in order to prioritize climate change adaptation plans. Interruptions caused by extreme weather events are also modelled using the company's supply chain methodology. The potential impacts identified enable Argos to implement early actions aimed at optimizing the logistics chain in order to reduce the magnitude of the impact. Other risks such as increasing operational costs (e.g., energy, water consumption and logistics) derived from chronic physical risk materializations that cause resource scarcity, are evaluated and managed through tools such as the water risk assessment and the supply chain models, for which action and management plans are developed (see question 2.3a, risks 4 and 6).
Inversiones en investigación y desarrollo	Sí	Argos' sustainable construction program is one of the pillars of its Environmental Strategy. This pillar is focused on satisfying the growing market demand for sustainable products, increasing the relevance of products with sustainable characteristics in the Company's portfolio, and guiding the clients in the selection for sustainable building materials. Argos develops projects to increase the use of supplementary cementitious materials, increase energy efficiency, increase the use of recycled aggregates and improve durability and resistance, among other projects. Regarding low carbon products, which Argos defines as products that have lower carbon footprint than the industry average carbon footprint, the company dedicated 60% of its total R&D budget, for researching and developing of these products in 2019.
Operaciones	Sí	Risks that represent increases in our operational costs created the need to develop a company-wide efficiency program aimed at increasing efficiencies and decreasing our risk exposure to events affecting our resource consumption and CO2 emissions. Therefore, it is possible to have a positive impact on profits through operational efficiency directed to reduce scope 1 and scope 2 CO2 emissions. This can be achieved through the development of projects complying to Argos' climate strategy drivers, e.g., optimize thermal and electric energy consumption, use of alternative fuels and reduce clinker cement ratio. For that reason, Argos considers that operational efficiency mitigates climate-related impacts through the implementation of better and cleaner technologies and co-processing programs. As strategy to realize this opportunity Argos has an Environmental Strategy in order to implement actions to reduce CO2 emissions, such as: CO2 inventory (scope 1, scope 2 and scope 3), CO2 reduction objectives, energy efficiency initiatives, alternative fuels roadmap, and reduction of clinker/cement ratio initiatives. In 2019, Argos implemented initiatives related to the company's climate change strategy, specifically with the lines of action that promote the mitigation of CO2 emissions. These actions involved investments of approximately USD \$ 26.3 million (86221 million COP), represented around USD 10.3 million (33687 million COP) in operational savings and avoided around 190409 tonnes of CO2 emissions.

**C3.1e**

(C3.1e) Describa dónde y cómo han influido en su planificación financiera los riesgos y oportunidades relacionadas con el clima.

Elementos de la planificación financiera que han sido influidos	Descripción de la influencia
<p>Fila 1</p> <p>Ingresos directos</p> <p>Costos indirectos</p> <p>Gastos de capital</p> <p>Asignación de capital</p> <p>Adquisiciones y desinversiones</p> <p>Acceso a capital</p> <p>Activo</p>	<p>• Revenues Through Sustainable Construction pillar of our Environmental Strategy, we respond to a changing world through innovation, opening new business opportunities and increasing revenues related to products with sustainability characteristics. Argos has identified sustainable characteristics in its products with the potential to generate significant positive environmental impacts. The main approach is to improve the capacity to satisfy new market needs (products and services) related to climate change and to develop them in every region where Argos is located. This, in addition to communicating how the product portfolio contributes to sustainable construction certification systems, such as LEED®, has opened new market opportunities. Our goal to 2025 is obtain revenues of US \$ 400 million for our products with sustainability characteristics. The financial implications of changes in consumer behavior due to climate change are related to the revenues from sales of products that contribute to climate change mitigation (e.g., low carbon products, avoided emission products), which represented 18.5% of total revenues in 2019.</p> <p>• Direct and Indirect costs The company is currently assuming increasing operational costs from higher energy prices and carbon pricing instruments. The company is assuming a carbon tax in Colombia applicable to liquid fuels consumption. In 2019, carbon tax costs in Colombia amounted to approximately COP 862.2 million. As a response, our Building Efficiency and Sustainability for Tomorrow (BEST) program aims to further focus the company on our customers and transform ourselves into a leader in terms of efficiency and competitiveness in our cement, concrete and aggregates businesses, while seeking greater return on capital employed. This efficiency and productivity strategy focus on the application of circular economy models, efficient production processes, diversification of energy management models and efficient supply chain management.</p> <p>- Energy efficiency: promote electrical and thermal efficiency in production processes. In 2019 around USD 3.1 million annual costs savings was obtained due to implementation of these initiatives.</p> <p>- Production optimization: we concentrated production in the most efficient plants and implemented new technologies and processes to optimize the cost per unit of product.</p> <p>- Circular economy: we implemented circular economy initiatives to reduce the environmental impact. These initiatives allowed us to achieve in 2019 around 1.4 USD million annual costs savings.</p> <p>- Logistics and transportation: make effective use of the available means of transportation and routes to reduce delivery times, decrease costs, improve the delivery cycle and reduce GHG emissions.</p> <p>- Organizational design: we adapted the corporate structure to build a streamlined and flexible company in order to be more efficient in the decision-making process. Among the next steps in financial planning in order to promote reduction of carbon emissions and at the same time maximize business profitability, we consider:</p> <ul style="list-style-type: none"> <li>- Maintain our focus on efficiency and improve costs of production;</li> <li>- Increasing alternative fuels and materials;</li> <li>- Improve clinker to cement ratio;</li> <li>- Make progress in the development of low carbon products, processes and solutions.</li> </ul> <p>• Capital expenditures/capital allocation Argos has developed the use of an internal carbon price in order to get prepared to the upcoming GHG regulations. This aims to select the best price for the company considering: benchmarking against peers, social price of carbon, and technical analyses. An internal carbon price was calculated as criteria for strategic CAPEX allocations so potential risks related to climate change were considered in the estimations of profitability indicators of each alternative, such as the Internal Rate of Return. In order to determine the impact of the application of this internal carbon price process within the company, Argos has tested it in several projects. Nevertheless, the company has not recently moved forward in incorporating this variable given that the company has been reducing approbation of CAPEX for several profitability projects due to those capital expenditures have been focused to generate positive free cash flow from operations. In 2019 the Company affirmed in its Integrated Report that "...The continuity of our financial flexibility strategy is also highlighted through the optimization of working capital, the rationalization of capex investment, and the divestiture of non-operational or non-strategic assets...".</p> <p>• Acquisitions and divestments Impact evaluations in terms of CO2 emissions are made during the environmental due diligences of our acquisitions and investments, as part of the acquisition process. We revise impacts on the targets for CO2 reductions defined by our environmental corporate strategy. However, detailed financial impacts of climate change risk and opportunities are not calculated or included in the final decision-making.</p> <p>• Access to capital Restrictions on access to capital as it is an intensive process in CO2 emissions is considered an emerging risk for the company. This relates to difficulty or cost overruns to obtain different sources to access financial capital or investors, due to higher scrutiny and loss of interest from financial capital providers towards carbon-intensive industries. As this is an emerging risk identified by the company, it is monitored, analyzed and managed by the teams involved on a regular basis. While we count on estimations of potential reputational events in market capitalization, in the future we aim to count on detailed analyses on how reputational events have impacted our access to capital to this date.</p> <p>• Assets Climate change risks such as extreme weather event influence our asset management process in fields like risk transfer and retention through the company's insurance policies and the supply chain planning modelling. The company evaluates periodically the exposure of weather events of all facilities. In 2019, losses for all locations were estimated using the AIR and RMS models, which enables to make better informed risk transfer and retention decisions as part of our corporate insurance program, as well as to better identify critical operations in order to prioritize climate change adaptation plans. Interruptions caused by extreme weather events are also modelled using the company's supply chain methodology. The potential impacts identified enable Argos to implement early actions aimed at optimizing the logistics chain in order to reduce the magnitude of the impact.</p>

C3.1f

### **(C3.1f) Proporcione información adicional sobre cómo los riesgos y oportunidades relacionadas con el clima han influido en su estrategia y planificación financiera (opcional).**

Argos' Climate Change Strategy is one of company's Environmental Strategy pillars and it is focused on minimizing climate change-related risks and maximizing opportunities through innovation in processes and products to ensure sustainability of the Company and its stakeholders. It defines the company's actions to mitigate and adapt to climate change and enables Argos to capture opportunities through increasing operational efficiency, improving energy efficiency, using alternative fuels, reducing clinker content in cement and developing new products and services along the value chain. In this sense, this strategy provides us with a roadmap to face the challenges and opportunities brought about by this phenomenon. This is achieved through planning by scenarios of our operations and their CO2 emissions (direct and indirect), ways to optimize these, and the opportunities for growth and innovation presented by our relationships with customers and the challenging global context.

Argos' processes for identifying, assessing, and managing climate change related risks & opportunities are integrated into multidisciplinary company-wide risk management procedures. Argos supports its risks management through the Integrated Risk Management System (IRMS), which is based on the ISO 31000 and COSO Enterprise Risk Management standards and is aligned with the company's model of Governance, Risk & Compliance. The IRMS enables Argos the successful execution of its strategy through the identification of possible risk scenarios, the evaluation of the level of exposure to all risks, and the monitoring of effectiveness of the mitigation actions. It identifies risks and opportunities either from a strategic point of view, for country level and project management (tactical) or for assets and facilities (operational). Consequently, Argos identifies and assesses climate-related risks and opportunities at the strategic, tactical and operational levels.

At strategic level Argos monitors its Strategic and Emerging Risks through the definition of risk scenarios and impacts quantification using strategic KPIs. After that, company sets controls to decrease risk exposure and action plans to reduce the level of risks that remains after controls are executed. Those scenarios promote opportune decision-making by top management at the corporate level through measures such as risk transfer and retention, or revision of strategic projects and goals.

Company has identified 11 Strategic Risks and 5 Emerging Risks. Three Strategic risks and one Emerging risk are directly related to climate change: new policies or changes in regulation (Strategic Risk 5), inability to achieve & maintain normative or voluntary environmental standards (SR8), occurrence of natural events that affect the continuity of key operations (SR9), and potential restrictions on access to capital for cement manufacturing businesses, as they are intensive in CO2 emissions (Emerging Risk 1). Therefore, climate change risks and opportunities are identified and assessed to establish its impact in the Company's strategic objectives, to determine how climate change may impact the materialization of other business risks in the middle and long term and consequently to establish work plans.

At tactical & operational level Argos assess climate change risks through several tools such as: end-to-end assessments to the environmental management processes (tactical), methodologies for measuring the facilities' exposure to weather events and potential losses associated to them (assets and facilities), and self-assessment to evaluate compliance to regulatory & voluntary standards. For evaluation of physical risks such as extreme weather events, Argos has relied on updated Nat Cat analyses performed & updated by Marsh during 2019-2020 under the AIR & RMS programs. Models estimate average annual losses and exceedance probability losses at the aggregate level and per significant event. These results provide relevant information for the corporate insurance program and serve as a prioritization mechanism to work in climate change adaptation plans per facility.

This strategy has enabled Argos implements best management practices:

- Assign the highest level of direct responsibility for climate change strategy of the Company to the Sustainability and Corporate Governance Committee, which belongs to Board of Directors and has the functions of guidance and tracking best practices in sustainability, including climate change. In 2019 Argos developed scenarios analysis to quantify the impact of strategic and emerging risks, including climate change risks. Those results were presented to the Company's Board of Directors to be included in the decision-making process.
- Include Climate Change strategy as one of the pillars of Argos Environmental Strategy.
- Assess each of its main externalities through the Value-Added Statement (VAS) in which the cost to society for 2019 derived from CO2 emissions was the most significant environmental externality.
- Sustainable Construction Strategy: constitutes one of the most important climate change opportunities for Argos.

In 2019, Argos continued implementing initiatives related to the company's climate change strategy, specifically with the lines of action that promote the mitigation of CO2 emissions. These actions involved investments of approximately USD \$ 26.3 million (86221 million COP).

Some of these initiatives were:

- We completed the commissioning of the artificial pozzolana production line (thermal activation of clays) and the new milling operation and blending stations at the Rio Claro Plant. The new formulation of Cement General Use with the addition of artificial pozzolan and limestone decreases specific CO2 emissions by 38% and thermal energy consumption by 30%, fulfilling performance and improving its durability conditions.
- We increased the substitution of conventional fuels with alternative fuels (tires, mixed industrial waste, RDF, used oils, biomass, etc.) achieving a 5.6% rate at company level.
- Our R&D team continued developing innovative and low carbon processes, products and solutions that allow reduce CO2 emissions at various stages of our value chain.
- We achieved significant progress in the development of CO2 capture and transformation technology with microalgae, through the assembly at the Cartagena Plant. We increased the efficiency in capture by 1.2%, we reached an efficiency of conversion of biomass into biocrudo of 63% and a conversion efficiency of biofuel in biofuel of 70%.
- Enhancements in operation and stability of kilns in various cement plants of Colombia Region, which has led to obtain savings in thermal energy.
- We continued using alternative raw materials in cement and concrete operations.
- We obtained Energy Star certification for cement plants in the USA region.

## **C4. Metas y desempeño**

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### **C4.1**

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**(C4.1) ¿Tenía un meta de emisiones activa durante el año de reporte?**

Meta de intensidad

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**C4.1b**

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**(C4.1b) Proporcione detalles sobre sus metas de intensidad de emisiones y el avance con respecto a dichas metas.****Número de referencia de la meta**

Int 1

**Año en que se fijó la meta**

2014

**Cobertura de la meta**

División de la empresa

**Alcance(s) (o categoría del alcance 3)**

Alcance 1

**Medidas de intensidad**

Otro. Especifique. (Specific Net CO2 per tonne of Cementitious Product )

**Año base**

2006

**Cifra de intensidad en el año base (toneladas métricas de CO2e por unidad de actividad)**

0.735

**% de las emisiones totales del año base en el(los) alcance(s) (o categoría del alcance 3) cubierto(s) por esta cifra de intensidad**

100

**Año meta**

2025

**Meta de reducción respecto del año base (%)**

26.02

**Cifra de intensidad en el año meta (toneladas métricas de CO2e por unidad de actividad) [cálculo automático]**

0.543753

**% de cambio anticipado en las emisiones absolutas de alcance 1+2**

-18.85

**% de cambio anticipado en las emisiones absolutas de Alcance 3**

0

**Cifra de intensidad en el año de informe (toneladas métricas de CO2e por unidad de actividad)**

0.628

**% de la meta alcanzado [cálculo automático]**

55.9485900432425

**Estado de la meta en el año de informe**

En progreso

**¿Esta es una meta basada en la ciencia?**

Sí, consideramos que es una meta basada en la ciencia, pero esta meta no ha sido aprobada por la Iniciativa Science Based Targets.

**Explicación (incluir cobertura de la meta)**

Argos implements the GCCA methodology "Cement CO2 & Energy Protocol" V.3.04 to calculate both scope 1 and scope 2 carbon footprint of its cement operations and other Key Performance Indicators (KPIs). The intensity measure of the base line year in 2006 (735 kg CO2/t cementitious product) and the reduction target (544 kgCO2/t cementitious product) were calculated as Indicator 74, "Specific Net CO2 per tonne of Cementitious Product" (<http://goo.gl/FX4v2x> line 074), where the numerator is absolute net CO2 (line 071) and the denominator is total cementitious products (line 21a). Argos' reduction target of net CO2 direct emissions (544 kgCO2/t cementitious product) represents a reduction of 26% by 2025 regarding 2006 (base year). As Argos' scope 1 target is specific to cement production, and only CO2 emissions from cement production were measured in the baseline year (2006), the percentage of emissions considered in the scope 1 in base year emissions is 100%. Likewise, it is considered that target coverage is "Business Division" since current Argos' scope 1 intensity target by 2025 is specific to cement production, which is one of Argos' three business divisions (along with the other two divisions, Concrete and Aggregates) and whose scope 1 emissions represents approximately 94% of total company scope 1 CO2 emissions. As a result of the company's efforts to reduce direct CO2 emissions, Argos achieved 628 kgCO2/t cementitious product in 2019, a reduction of 15% in comparison to the 2006 baseline of 735 kgCO2/t cementitious product. This 15% reduction that was obtained in 2019 with respect to the base year 2006 means that 56% of the goal to 2025 (which is 26%) has already been completed. In other words: % of target achieved =  $(15/26)*100 = 56\%$  The projected decrease in absolute scope 1 emissions reported takes into account the forecast of production in each strategic region by 2025 and the expected CO2 intensity in each one. The indirect CO2 emissions (scope 2 and scope 3) are calculated and monitored by Argos; however, the Company has no public targets for reduction of these emissions yet. Argos has a location-based scope 2 emissions target but for internal communications purposes; as it is still in the process of being developed fully and is under changes and adjustments, the company has decided not to disclose it yet.

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**C4.2****(C4.2) ¿Tenía otra meta activa relacionada con el clima durante el año de informe?**

Ninguna otra meta relacionada con el clima

C4.3

(C4.3) ¿Tenía iniciativas para la reducción de emisiones activas durante el año de informe? Observe que estas puede incluirlas en las fases de planificación y/o implementación.

Sí

C4.3a

(C4.3a) Identifique la cantidad total de iniciativas en cada etapa de desarrollo, y para aquellos en las etapas de implementación, los ahorros estimados de CO2e.

	Número de iniciativas	Estimado del ahorro total anual de CO2e en toneladas métricas de CO2e (únicamente para las filas marcadas con *)
Bajo investigación	10	
Se implementará*	0	
Implementación iniciada*	0	
Implementado*	6	190550
No se implementará	0	

C4.3b

(C4.3b) Proporcione detalles sobre las iniciativas implementadas en el año del informe en la siguiente tabla.

**Categoría de la iniciativa y tipo de la iniciativa**

Eficiencia energética en procesos de producción	Cambio de combustibles
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**Estimado del ahorro anual de CO2e (toneladas métricas de CO2e)**

61590

**Alcance(s)**

Alcance 1

**Voluntario/Obligatorio**

Voluntario

**Ahorro económico anual (unidad monetaria, de acuerdo con su elección en C0.4)**

4530829800

**Inversión necesaria (unidad monetaria, de acuerdo con su elección en C0.4)**

81644867

**Período de recuperación**

<1 año

**Estimado de la vida útil de la iniciativa**

6-10 años

**Comentario**

Argos has the target to substitute 18% of conventional fossil fuel heat consumption with alternative fuels by 2025. In 2019 Argos achieved a 5.6% rate of use in alternative fuels in replacement of conventional fuels with the use of more than 86000 tons of waste. The plants that used alternative fuels as part of the fuel mix for their clinker kiln were the following: Roberta, Harleyville, Newberry (USA), Comayagua (Honduras), Dorado (Puerto Rico), Rioclaro and Cartagena (Colombia). Also, Argos is making progress in strengthening the alternative fuel supply chain in the three regional operations.

**Categoría de la iniciativa y tipo de la iniciativa**

Reducción de las emisiones de procesos industriales no relacionados con la energía	Sustitución de materiales del proceso
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**Estimado del ahorro anual de CO2e (toneladas métricas de CO2e)**

69085

**Alcance(s)**

Alcance 1

**Voluntario/Obligatorio**

Voluntario

**Ahorro económico anual (unidad monetaria, de acuerdo con su elección en C0.4)**

18962346985

**Inversión necesaria (unidad monetaria, de acuerdo con su elección en C0.4)**

85279647089

**Período de recuperación**

4-10 años

**Estimado de la vida útil de la iniciativa**

En curso

**Comentario**

In several cement plants of Colombia, Caribbean and Central America and USA Regions, a reduction of the clinker cement ratio was achieved in 2019 in comparison with 2018, which was possible by replacing clinker with slags, fly ashes, CKD and others. Argos completed the commissioning of the artificial pozzolana production line (thermal activation of clays) and the new milling operation and blending stations at the Rioclaro Plant. The new formulation of Cement General Use with the addition of artificial pozzolan and limestone, replacing clinker, decreases specific CO2 emissions by 38% and thermal energy consumption by 30%, fulfilling performance and improving its durability conditions.

**Categoría de la iniciativa y tipo de la iniciativa**

Eficiencia energética en procesos de producción	Optimización de procesos
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**Estimado del ahorro anual de CO2e (toneladas métricas de CO2e)**

1640

**Alcance(s)**

Alcance 2 (basadas en localización)

**Voluntario/Obligatorio**

Voluntario

**Ahorro económico anual (unidad monetaria, de acuerdo con su elección en C0.4)**

3727132693

**Inversión necesaria (unidad monetaria, de acuerdo con su elección en C0.4)**

0

**Período de recuperación**

Sin recuperación

**Estimado de la vida útil de la iniciativa**

En curso

**Comentario**

Argos has the goal for 2025 to decrease the electricity consumption by 15%. In 2019, Argos continued to implement projects and initiatives related Improvements in electrical efficiency. Some of these initiatives were: - Optimization of processes through electric efficiency projects, within the framework of the Energy Policy roadmap. - Energy Star certification for the Harleyville, Newberry and Roberta plants in the USA region. - It was launched the solar farm in Honduras, which Argos began developing with Celsia since 2017. It is able to provides nearly 20% of the electricity required for the cement plant of that country.

**Categoría de la iniciativa y tipo de la iniciativa**

Eficiencia energética en procesos de producción	Optimización de procesos
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**Estimado del ahorro anual de CO2e (toneladas métricas de CO2e)**

58079

**Alcance(s)**

Alcance 1

**Voluntario/Obligatorio**

Voluntario

**Ahorro económico anual (unidad monetaria, de acuerdo con su elección en C0.4)**

6466641003

**Inversión necesaria (unidad monetaria, de acuerdo con su elección en C0.4)**

0

**Período de recuperación**

Sin recuperación

**Estimado de la vida útil de la iniciativa**

En curso

**Comentario**

Argos has the goal for 2025 to decrease the heat consumption by 10%. In 2019 Argos continued implementing projects and initiatives related improvements in thermal efficiency. Some of these initiatives were: - Optimization of processes through thermal efficiency projects, within the framework of the Energy Policy roadmap. - Energy Star certification for the Harleyville, Newberry and Roberta plants in the USA region. - Argos continued using Fluorite as a mineralizing agent for clinker in the Piedras Azules cement plant in Honduras, obtaining better rates of specific heat consumption in clinker production. - Enhancements in operation and stability of kilns in several cement plants of Colombia Region, which has led to obtain savings in thermal energy.

**Categoría de la iniciativa y tipo de la iniciativa**

Cambio en una política de la empresa o en el comportamiento	Otro. Especifique. (Employee commuting)
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**Estimado del ahorro anual de CO2e (toneladas métricas de CO2e)**

14.13

**Alcance(s)**

Alcance 3

**Voluntario/Obligatorio**

Voluntario

**Ahorro económico anual (unidad monetaria, de acuerdo con su elección en C0.4)**

0

**Inversión necesaria (unidad monetaria, de acuerdo con su elección en C0.4)**

99063000

**Período de recuperación**

De 1 a 3 años

**Estimado de la vida útil de la iniciativa**

En curso

**Comentario**

Through its sustainable mobility program (AMOVilizarte), which was created in 2016, Argos seeks to reduce the carbon footprint of its employees' transportation, promoting carpooling, walking and cycling. This program enabled Argos' employees to travel 83,472 km and save 14.13 tCO2 emissions in 2019.

**Categoría de la iniciativa y tipo de la iniciativa**

Cambio en una política de la empresa o en el comportamiento	Otro. Especifique. (Sustainable mobility)
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**Estimado del ahorro anual de CO2e (toneladas métricas de CO2e)**

141

**Alcance(s)**

Alcance 3

**Voluntario/Obligatorio**

Voluntario

**Ahorro económico anual (unidad monetaria, de acuerdo con su elección en C0.4)**

1300000000

**Inversión necesaria (unidad monetaria, de acuerdo con su elección en C0.4)**

250000000

**Período de recuperación**

&lt;1 año

**Estimado de la vida útil de la iniciativa**

En curso

**Comentario**

Argos has advanced in the sustainable mobility for raw material transportation to production plants, likewise in final products delivery to its clients: - Logistic companies' suppliers from Argos at Colombia operations, have acquired tractors that operate 100 percent on natural gas on the routes from Cartagena to Barranquilla and from Cajicá to Bogotá. - Argos has implemented cement transport by train on the route from Sogamoso to Bogotá, transporting an average of 2,400 tons per month. - The Company has implemented the light truck trailers initiative, which enabled vehicle-loading capacity to increase by 9% and reduce total transport costs while generating less CO2 emissions. - At Colombia operations, the company consolidated a supplementary supply network with some national companies, seeking to take advantage of 100% of the automotive trajectories for the transportation of its products and those of third parties making use of the backhaul.

**C4.3c**

**(C4.3c) ¿Qué métodos utiliza para impulsar la inversión en actividades de reducción de emisiones?**

Método	Comentario
Presupuesto dedicado para la eficiencia energética	Thermal and electrical energy are critical inputs for Argos's production processes. Managing them efficiently enables to the Company to reduce the use of natural resources and minimize costs and net CO2 emissions. For this reason, Argos has as targets in its Energy Strategy: decrease heat consumption by 10% and electricity consumption by 15%, with the year 2013 as baseline, by the year 2025. During 2018 the company moved towards energy consumption reduction across its three regions: Colombia, USA and Caribbean and Central America: - Enhancements in operation and stability of kilns in various cement plants of Colombia Region, which has led to obtain savings in thermal energy. - Argos implemented a performance plan on the kiln at Harleyville Cement Plant, focused on increasing productivity and reliability. - The company continued with the implementation of minerals (like fluorite) that contribute to reducing thermal and electrical consumption in the cement process. - Energy Star certifications were obtained by the Harleyville, Newberry and Roberta plants in the USA region. - It was launched the solar farm in Honduras, which was began developing with Celsia since 2017. It is able to provides nearly 20% of the electricity required for the cement operation of that country.
Presupuesto dedicado para investigación y desarrollo de productos con bajo nivel de carbono	In the Environmental Strategy of Argos, sustainable construction is one of its pillars. The focus of this pillar is to satisfy the growing market demand for sustainable products, increasing the relevance of products with sustainable characteristics in the Company's portfolio, and guiding the clients in the selection for sustainable building materials. Through innovation, Argos develops specialized cements and concretes, to solve constructive challenges with extraordinary solutions. Argos develops projects to increase the use of supplementary cementitious materials, increase energy efficiency, increase the use of recycled aggregates and improve durability and resistance, among other projects. Regarding low carbon products, which Argos defines as products that have lower carbon footprint than the industry average carbon footprint, the company dedicated in 2019 60% of its total R&D budget for researching and developing of these products.
Presupuesto dedicado para otras actividades de reducción de otras emisiones	Environmental and Energy strategies of the company include activities like: reduce energy intensity, optimize clinker/cement ratio, replace conventional fuels by alternative fuels in the clinkerization process and use cleaner types of fuels. To implement the mentioned strategies, Argos has dedicated budget by regions and operations. In 2019 Argos finished and developed projects and initiatives that involved investments of approximately USD \$26.3 million. Some lines of work are the following: - Reduce clinker content in all types of cement. - Increase the substitution of conventional fuels with alternative fuels. - Increase the use of alternative raw material in cement and concrete businesses. - Process optimization through thermal and electrical efficiency projects, in the framework of the energy roadmap and other initiatives. - Continuation of production management system focused on finding the best operating practices, which has allowed efficiency improvements of processes and reduced energy consumption.
Compromiso de los empleados	In 2019 Argos continued with its sustainable mobility program (AMOVilazarte) to reaffirm its commitment with the responsible development of cities and its operations. It is a program that promotes in Argos employees the sustainable mobility, through practices such as sharing vehicles, walking more and using cleaner means of transport like the electric bicycles (that are provided by the company). This program has lots of benefits, such as the reduction of CO2 emissions of employees due to transport, reduction in travel times, promotion of healthy practices, and the contribution to a more fluid mobility in the cities. The company heavily encourages its employees to look for options in business travels for remote meetings; this promotes the efficiency in the company, allows CO2 emissions reduction due to business travels, and also allows the employees to maintain a better balance between their personal life and work. Periodically Argos publishes different pieces of data on the use of the bikes, highlighting the person who has used them the most in that period, the CO2 emissions avoided due to their use, the increase in the use of bicycles, etc. Likewise, Argos has promoted telecommuting, which is a work modality that brings benefits both for workers and for the organization, such as: - Improvement of living standards (telework becomes an alternative of balance between the personal life and work). - Reduction of commuting time for workers.
Precio interno del carbono	Argos has an Internal Carbon Price to assess financial risks in CAPEX projects (e.g. use of alternative fuels, energy efficiency projects and production capacity increase). The evaluation includes all those projects that generate a reduction or an increase of Scope 1 and 2 CO2 absolute emissions. For doing so, an interdisciplinary team was formed within the company and the best price was defined for the current situation of the company after analyzing different options including: projections from climate-related regulation, benchmarking against peers, social price of carbon, and technical analysis. For determining the price, Argos considered as a main reference the carbon tax that since 2016 has been applied in Colombia for liquid fuels usage, and because is in Colombia where most CO2 direct emissions are produced. This method helps towards investment decisions and is used as a risk management tool within the organization Climate Strategy. The process for applying it within the company is the following: - Identify within the results for the CAPEX allocation system of the company those new projects in line with adding profitability to the company. - Calculate the contribution of those new projects to increase or reduce CO2 absolute emissions, which will represent the cost that the company would assume. - Determine the level of risk identified for the company, making projections for different years. Also, the hypothetical scenarios are analyzed for the geographies where the company is located. -Calculation of cost or savings of the final net value to society. -Calculation of financial impact of each project under the assumption of a possible CO2 tax and finally a sensitivity analysis is conducted to determine to which level of extent any KPI's, such as the Internal Rate of Return (IRR), is affected by the internal carbon price applied.
Incentivas/programas de reconocimiento internos	Argos has a Variable Compensation System (monetary incentives) that promotes the achievement of the strategic targets. Through this system, extra salary bonuses are paid to employees when the goals are achieved. Depending on the organizational level within the company, there are two types of incentives that could apply: short term incentives and long term incentives. The short-term monetary incentive (annual) establishes targets which are evaluated and reviewed at the end of the established periods. The long-term monetary establishes follow-up, measurement and compliance with the goals for periods of 3 years; however, the planning, measurement and tracking of these indicators are carried out every year and the next three-year period is planned. In addition, Argos has a system of non-monetary incentives to promote the generation of innovative ideas, which is named IDEAXION, an organizational tool for the innovation management that allows the collection of innovative ideas from anyone anywhere in the Company, and, it has a system of points assigned to reward authors and mentors of those innovative ideas. This initiative is part of the strategies aimed at the efficient use of resources, maximizing the profitability of businesses, expanding the portfolio of products and services with sustainability characteristics, adopting high quality standards and responding to the needs of the markets local. In 2019, Argos integrated the management of the compensation system and IDEAXION program in order to promote savings achievements generated by improvements or changes in processes or products or substitution of raw materials or fuels, in the different plants and headquarters. Another program with non-monetary incentives is "sustainable mobility program" (AMOVilazarte), which highlights and promotes sustainable mobility through the following mechanisms: carpooling, walking and using cleaner means of transportation such electric bicycles provided by the company.
Otro	Since 2016 Argos has included the analysis of externalities in its reporting and accountability model. These impacts are quantified in the Value Added to Society (VAS) report, which was developed based on the True Value methodology and includes the costs and benefits generated to society in the economic, social and environmental dimensions. These costs and benefits are monetized to reflect the impact that Argos operation had on society in a given period. In terms of GHG economic impact to society, Argos based its carbon price on the social cost of carbon (SCC), which reflects the cost of the damage for society generated by GHG emissions over the lifetime. In 2019 Argos used the Environmental Protection Agency (EPA) SCC estimates (EPA, 2016), which amounts to USD 31.10 after adjusting for inflation and the 4% discount rate applied according to the options provided by the study. Annual estimates vary based on the discount rate applied, which determines the present value of future damages derived from climate change.
Otro	In 2019 Argos continued implementing its BEST program (Building Efficiency and Sustainability for Tomorrow) an efficiency accelerator that Argos has been deployed to become closer to its customers, enrich the value proposition of all segments, and compete in the market with the highest added value in terms its portfolio, performance, and quality of products and solutions, always seeking the highest levels of innovation, competitiveness and efficiency in operations, as pillars of profitability and growth of the company. This program focuses on the following lines: - Non-strategic asset optimization: concentrate the use of capital on generating cash flow for the core business, which includes divestments of non-strategic assets. - De-leveraging: reduce level of indebtedness to gain financial flexibility. This ensures the sustainability of the business over time as well as the possibilities for expansion and consolidation of operations. - Energy efficiency: promote electrical and thermal efficiency in production processes by defining and monitoring ten key rules that permit energy resources optimization and achieve world-class performance. - Production optimization: concentrate production in the most efficient plants, make proper use of resources, and implement new technologies and processes to optimize the cost per tonne or cubic meter of the product. - Circular economy: take advantage of waste in order to reduce the environmental impact of the exploitation of non-renewable natural resources. - Logistics and transportation: strive to make effective use of the available means of transportation and routes, taking the logistics of each region into account and making the best use of our resources and geographic location to reduce delivery times, decrease costs and improve the delivery cycle. - Organizational design: adapt the corporate structure to build a streamlined and flexible company that is more efficient in the decision-making process. - Supplier management: focus on selecting suppliers carefully, transferring knowledge, promoting best practices through their recognition and building long-term trust relationships that foster mutual growth.

**C4.5**

**(C4.5) ¿Clasifica algunos de sus bienes y/o servicios existentes como productos bajos en carbono o ellos permiten que un tercero evite emisiones de GEI?**

Si

**C4.5a**

**(C4.5a) Proporcione detalles de sus productos y/o servicios que usted clasifica como productos bajos en carbono o que permiten que un tercero evite emisiones de GEI.**

**Nivel de agregación**

Grupo de productos

**Descripción del producto/grupo de productos**

Low carbon products have low embedded emissions. Argos continuously develops projects to increase the use of supplementary cementitious materials, increase energy efficiency, increase recycled aggregates and improve durability and resistance, among other projects. In this category of products Argos has: - Cement products: Cement that have at least 30% of raw material substitution: Cement General Use (Sogamoso), Type III cement–Blended (Atlanta), PLC – Blended (Atlanta), Masonry cement (Atlanta), Masonry Type N DMC (Roberta), Masonry Type N MUD (Roberta), Masonry Type N MMM (Roberta), Masonry Type S (Roberta), SuperCem/SlagCement (Tampa), Slag blend (Tampa), Fly-ash blend (Tampa); Cement UNO, ECO MULTIPROPÓSITO (Honduras); General Use, Masonry, Cement Concrete, Marine (Panama). - Concrete products: Concrete mixes that have at least 30% of raw material substitution: G-Crete Prime Green Top Green Ready mix codes from different plants in the USA evaluated under LCA: 1597, 1734, 1735, 1738, 1811, 1841, 1899, 2554, 4070, 4072, 8482, 8880, 9279, 9630.

**¿Son productos con bajo nivel de carbono o permiten emisiones evitadas?**

Producto bajo en carbono

**Taxonomía, proyecto o metodología utilizada para clasificar producto(s) como bajo(s) en carbono o para calcular emisiones evitadas**

Otro. Especifique. (Products that have low carbon footprint)

**% de ingresos procedentes de productos bajos en carbono durante el año de referencia**

18.15

**% del valor total de la cartera**

<Not Applicable>

**Clases de activos/Tipos de productos**

<Not Applicable>

**Comentario**

Argos works to create sustainable value, effectively responding to new market dynamics and positioning itself as industry leader through innovation. Thus, product portfolio and customized solutions is the value proposition that Argos offers to its customers, which differentiates it in the marketplace through its product portfolio, i.e. cement, concrete, aggregates, as well as differential services such as technical assistance, integrated logistics, and customized solution design. In addition, under the "Sustainable construction" pillar of the Environmental Strategy, Company leverage life cycle management and develop products focused on solving constructive challenges with extraordinary solutions through innovation. Therefore, Argos develops products with low GHG emissions in its life cycle. Between 2011 & 2014, Argos performed a Life Cycle Assessment (LCA) Project that enabled the company to know the environmental performance of 347 concrete mixes & demonstrate that a lot of them presents a better performance regarding GWP compared to the NRMCA wide industry EPD. Argos has performed Eco-Efficiency analysis for sustainability impact assessment of three USA green mixes: Top Green, PrimeGreen, G-Crete. Estimated avoided CO2 emissions of this mixes are: - TopGreen: 146 lb CO2e/yd3. It represents a 30% of the emissions that a reference concrete would emit. - PrimeGreen: 70 lb CO2e /yd3. It represents a 14% of the emissions that a reference concrete would emit. - G-Crete: 50 lb CO2e /yd3. It represents a 10% of the emissions that a reference concrete would emit. Other products of Argos have lower carbon footprint compared to the industry average, which can be considered Low Carbon Products. Colombian Region has products that avoid emissions of 243 kg CO2e/t of cement type I & 36 kg of CO2/t of cement for concrete mixes. At start 2020 Argos launched new Green Cement, which is considered as a Low Carbon Product. This new product has high content of supplementary cementitious materials replacing clinker in product, thereby it reduces carbon dioxide emissions by 38 percent and energy consumption by 30 percent, while maintaining the technical performance of the product. This product was launched this year therefore its sales were not included in the figure presented in column "% revenue from low-carbon product(s) in the reporting year".

**Nivel de agregación**

Grupo de productos

**Descripción del producto/grupo de productos**

Avoided emissions products allows a company's client to avoid CO2 emissions. Argos considers those products with these criteria: products that have at least 30% of raw material substitution, that have longer life, and that have less CO2 footprint in the life cycle than the average. In this category of products Argos has: - Cement products: Cement General Use (Sogamoso), Type III cement – Blended (Atlanta), PLC – Blended (Atlanta), Masonry cement (Atlanta), Masonry Type N DMC (Roberta), Masonry Type N MUD (Roberta), Masonry Type N MMM (Roberta), Masonry Type S (Roberta), SuperCem/SlagCement (Tampa), Slag blend (Tampa), Flyash blend (Tampa); Cement UNO, ECO MULTIPROPÓSITO (Honduras); General Use, Masonry, Concrete Cement, Marine (Panama); Cement that have at least 30% of raw material substitution. - Concrete products: Durability concrete, High performance concrete, Ultra High-performance concrete, Color Concrete & Palette Concrete, Pavement Concrete, Concrete mixes that have at least 30% of raw material substitution.

**¿Son productos con bajo nivel de carbono o permiten emisiones evitadas?**

Emisiones evitadas

**Taxonomía, proyecto o metodología utilizada para clasificar producto(s) como bajo(s) en carbono o para calcular emisiones evitadas**

Otro. Especifique. (products that have at least 30% of raw material substitution and that have longer life than average)

**% de ingresos procedentes de productos bajos en carbono durante el año de referencia**

18.35

**% del valor total de la cartera**

<Not Applicable>

**Clases de activos/Tipos de productos**

<Not Applicable>

**Comentario**

Argos works to create sustainable value, effectively responding to new market dynamics and positioning itself as industry leader through innovation. Thus, product portfolio and customized solutions is the value proposition that Argos offers to its customers, which differentiates it in the marketplace through its product portfolio, i.e. cement, concrete, aggregates, as well as differential services such as technical assistance, integrated logistics, and customized solution design. In addition, under the "Sustainable construction" pillar of the Environmental Strategy, Company leverage life cycle management and develop products focused on solving constructive challenges with extraordinary solutions through innovation. Argos promotes development of products that enable a third party to avoid GHG emissions. Argos performed a Life Cycle Assessment (LCA) Project, which enabled the company to know the environmental performance of 347 concrete mixes and demonstrate that a lot of them presents a better performance regarding GWP compared to the NRMCA wide industry EPD. Furthermore, Argos has performed Eco-Efficiency analysis for sustainability impact assessment of three USA green mixes: Top Green, PrimeGreen, G-Crete. The estimated avoided CO2 emissions of this mixes are the following: - TopGreen: 146 lb CO2e/yd3. - PrimeGreen: 70 lb CO2e /yd3 - G-Crete: 50 lb CO2e /yd3 Other products of Argos have lower carbon footprint compared to the industry average, which can be considered Avoided emissions Products.

## C-CE4.9

(C-CE4.9) Divulgue las mejores técnicas disponibles de su empresa como porcentaje de la capacidad de producción de clinker de cemento Portland.

	Cobertura de la capacidad de producción total (%)
4+ pre calentamiento ciclónico	12.56
Pre calcinador	77.46

## C5. Metodología de las emisiones

### C5.1

(C5.1) Indique su año base y las emisiones del año base (alcances 1 y 2)

#### Alcance 1

**Inicio del año base**  
enero 1 2006

**Fin del año base**  
diciembre 31 2006

**Emisiones año base (toneladas métricas de CO2e)**  
9808867

#### Comentario

The base year 2006 for the inventory corresponds to the year from which the consolidated inventory of CO2 emissions from all cement operations of the company began. Similarly, the year 2006 corresponds to the base year with respect to which the goal of reduction of net emissions of CO2 scope 1 was set, for the cement business, by year 2025.

#### Alcance 2 (basadas en localización)

**Inicio del año base**  
enero 1 2006

**Fin del año base**  
diciembre 31 2006

**Emisiones año base (toneladas métricas de CO2e)**  
318891

#### Comentario

The base year 2006 for the inventory corresponds to the year from which the consolidated inventory of CO2 emissions from all cement operations of the company began. Argos has a location-based Scope 2 emissions target for internal communications purposes, but as it is still in the process of being developed fully. The company has not yet chosen to disclose it publicly.

#### Alcance 2 (basada en el mercado)

**Inicio del año base**

**Fin del año base**

**Emisiones año base (toneladas métricas de CO2e)**

#### Comentario

### C5.2

(C5.2) Seleccione el nombre del estándar, el protocolo o la metodología que utilizó para recolectar datos de actividad y calcular las emisiones.

El protocolo para gases de efecto invernadero: Estándar Corporativo de Contabilidad y Reporte (Edición Revisada)

WBCSD: Protocolo de CO2 y energía del cemento

## C6. Datos sobre las emisiones

### C6.1

**(C6.1) ¿Cuáles fueron las emisiones brutas de CO2e en toneladas métricas del alcance 1 de su organización?**

**Año de informe**

**Emisiones brutas globales del alcance 1 (toneladas métricas de CO2e)**

8713631

**Fecha de comienzo**

enero 1 2019

**Fecha de fin**

diciembre 31 2019

**Comentario**

Direct CO2 emissions in Argos are the sum of those generated by cement (including energy production), concrete, and aggregates operations, and the total in 2019 was 8713631 t. Cement operations contributed 98.5% (including energy production's 4.5%), concrete 1.5%, and aggregates 0.05%. The distribution of emissions by region was 49.8% for Colombia, 42.5% for USA, and 7.7% for Caribbean and Central America.

**Año pasado 1**

**Emisiones brutas globales del alcance 1 (toneladas métricas de CO2e)**

**Fecha de comienzo**

**Fecha de fin**

**Comentario**

**C6.2**

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**(C6.2) Describa el enfoque de su organización para divulgar emisiones de alcance 2.**

**Fila 1**

**Alcance 2, basado en la localización**

Reportamos una cifra de alcance 2, basada en la localización

**Alcance 2, basada en el mercado**

Disponemos de operaciones en las que podemos acceder a factores de emisiones del proveedor de electricidad o factores de emisiones residuales, pero no podemos reportar una cifra de Alcance 2, basada en el mercado

**Comentario**

Argos currently calculates Scope 2 emissions with the location-based methodology. However, Argos is moving forward in speaking with electricity suppliers requesting renewable energy certificates for the renewable fraction of energy provided. Scope 2 GHG emissions were measured with the location-based method; the emission factor associated to the electricity purchased from the grid, in kgCO2/MWh, can vary significantly from one year to the next, according to the variations in the energy matrix of the country or area where each plant operates. In 2019, the emission factors for Colombia were taken from the SIEL (Colombian Electricity Information System), which is a program from the UPME (Mining and Energy Planning Unit); for the Caribbean and Central America region, from the International Energy Agency (IEA); and for the USA, they were taken from the Environmental Protection Agency, in the webpage from Emissions & Generation Resource Integrated Database (eGRID).

**C6.3**

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**(C6.3) ¿Cuáles fueron las emisiones brutas de CO2e en toneladas métricas del alcance 2 de su organización?**

**Año de informe**

**Alcance 2, basada en localización**

446322

**Alcance 2, basada en el mercado (en caso de corresponder)**

<Not Applicable>

**Fecha de comienzo**

enero 1 2019

**Fecha de fin**

diciembre 31 2019

**Comentario**

Argos Scope 2 CO2 emissions in 2019 were 446322 tonne, which represents indirect CO2 emissions derived by the sum of electricity purchased across its cement, concrete, and aggregates operations. Cement operations contributed 97.0%, concrete 2.9%, and aggregates 0.2%. The regional contribution had USA in the lead with 76.1%, then Caribbean and Central America with 16.6%, and finally Colombia with 7.3%. The USA region had the greatest contribution since 100% of the electric energy consumed there is purchased.

**Año pasado 1**

**Alcance 2, basada en localización**

**Alcance 2, basada en el mercado (en caso de corresponder)**

<Not Applicable>

**Fecha de comienzo**

**Fecha de fin**

**Comentario**

## C6.4

**(C6.4) ¿Hay alguna fuente (por ej. instalaciones, GEI específicos, actividades, geografías, etc.) de emisiones del alcance 1 y alcance 2 que se encuentren dentro de los límites seleccionados que no estén incluidas en su divulgación?**

No

## C6.5

**(C6.5) Justifique las emisiones brutas globales del alcance 3 de su organización, y divulgue y explique cualquier exclusión.**

### Bienes o servicios comprados

#### Estado de evaluación

Relevante, calculado

#### Toneladas métricas de CO<sub>2</sub>e

3373602

#### Metodología de cálculo de las emisiones

The calculation was made with the Quantis SUITE 2.0 software from Quantis Enterprise, which works under the GHG Protocol methodology "Accounting and Reporting Standard for the Corporate Value Chain (Scope 3)" (World Business Council for Sustainable Development (WBCSD) and World Resources Institute (WRI), 2011). Using this software, Argos updated its scope 3 inventory in 2019. Category 1 emissions were calculated including all upstream purchasing information into the software and using emissions factors given by Ecoinvent 2.2, which is a database integrated into this software, to find the correspondent emissions to each material purchased in each business (cement, concrete and aggregates) and each region (Colombia, USA and Caribbean and Central America). Coverage: Cement, concrete and aggregates operations of the Colombia, Caribbean and Central America and USA regions.

#### Porcentaje de las emisiones calculado sobre la base de los datos obtenidos de proveedores o socios de la cadena de valor

0

#### Explicación

Argos has a Climate Change Strategy whose objective is to minimize climate change-related risks and create new business opportunities. The company prioritized 5 categories as "Relevant" of the 15 categories that comprise the Scope 3. The prioritization process was based on the results of the study developed by Quantis for Argos, entitled "Calculation of Cementos Argos' GHG Emissions from Priority Sources of Scope 3 Emissions", in addition to the guidelines provided by the "Cement Sector Scope 3 GHG Accounting and Reporting Guidance", developed by the WBCSD - CSI. Category 1, Purchased Goods and Services, was one of the 5 relevant categories. Of these 5 categories, Category 1 represented 78% of total Scope 3 emissions in 2019.

### Bienes de capital

#### Estado de evaluación

No relevante, explicación provista

#### Toneladas métricas de CO<sub>2</sub>e

<Not Applicable>

#### Metodología de cálculo de las emisiones

<Not Applicable>

#### Porcentaje de las emisiones calculado sobre la base de los datos obtenidos de proveedores o socios de la cadena de valor

<Not Applicable>

#### Explicación

Argos prioritized 5 of the 15 categories that compose Scope 3 as relevant; this prioritization process was based on the results of the study developed by Quantis for Argos "Calculation of GHG emissions from Scope 3 prioritized sources of Cementos Argos" and on the guidelines given by the "Cement Sector Scope 3 GHG Accounting and Reporting Guidance" developed by the CSI (Cement Sustainability Initiative). The relevant categories calculated were: -Category 1: Purchased goods and services. - Category 3: Fuel and energy related activities. -Category 4: Upstream transportation and distribution. -Category 6: Business travel. -Category 9: Downstream transportation and distribution. Capital goods (Category 2) was not selected as a relevant category considering the share of these emissions within the total Scope 3 emissions of the company.

### Actividades relacionadas con combustible y energía (no incluidas en el alcance 1 o 2)

#### Estado de evaluación

Relevante, calculado

#### Toneladas métricas de CO<sub>2</sub>e

674332

#### Metodología de cálculo de las emisiones

The calculation was made with the Quantis SUITE 2.0 software from Quantis Enterprise, which works under the GHG Protocol methodology "Accounting and Reporting Standard for the Corporate Value Chain (Scope 3)" (World Business Council for Sustainable Development (WBCSD) and World Resources Institute (WRI) (2011). Coverage: Cement, concrete and aggregates operations of the Colombia, Caribbean and Central America and USA regions.

#### Porcentaje de las emisiones calculado sobre la base de los datos obtenidos de proveedores o socios de la cadena de valor

0

#### Explicación

Argos has a Climate Change Strategy whose objective is to minimize climate change-related risks and create new business opportunities. The company prioritized 5 categories as "Relevant" of the 15 categories that comprise the Scope 3. The prioritization process was based on the results of the study developed by Quantis for Argos, entitled "Calculation of Cementos Argos' GHG Emissions from Priority Sources of Scope 3 Emissions", in addition to the guidelines provided by the "Cement Sector Scope 3 GHG Accounting and Reporting Guidance", developed by the WBCSD - CSI. Category 3, Fuel and Energy-Related Activities, was one of the 5 relevant categories. Of these 5 categories, Category 3 represented 16% of total Scope 3 emissions in 2019.

## Transporte y distribución upstream

### Estado de evaluación

Relevante, calculado

### Toneladas métricas de CO2e

198718

### Metodología de cálculo de las emisiones

For the Colombia region information was collected from the most representative transportation supplier of raw materials and products in process (Logitrans). For the calculation of the emissions of the other two regions (USA and the Caribbean and Central America), the Quantis SUITE 2.0 software from Quantis Enterprise was used, which works under the GHG Protocol methodology "Accounting and Reporting Standard for the Corporate Value Chain (Scope 3)" (World Business Council for Sustainable Development (WBCSD) and World Resources Institute (WRI) (2011). Coverage: Cement, concrete and aggregates operations of Colombia, Caribbean and Central America and USA regions

### Porcentaje de las emisiones calculado sobre la base de los datos obtenidos de proveedores o socios de la cadena de valor

40.3

### Explicación

Argos prioritized 5 categories as "Relevant" of the 15 categories that comprise the Scope 3. The prioritization process was based on the results of the study developed by Quantis for Argos, entitled "Calculation of Cementos Argos' GHG Emissions from Priority Sources of Scope 3 Emissions", in addition to the guidelines provided by the "Cement Sector Scope 3 GHG Accounting and Reporting Guidance", developed by the WBCSD - CSI. Category 4 (upstream transportation and distribution) is among the 5 relevant categories. Of these 5 categories, Category 4 represented 5% of total Scope 3 emissions in 2019.

## Desechos generados en las operaciones

### Estado de evaluación

No relevante, explicación provista

### Toneladas métricas de CO2e

<Not Applicable>

### Metodología de cálculo de las emisiones

<Not Applicable>

### Porcentaje de las emisiones calculado sobre la base de los datos obtenidos de proveedores o socios de la cadena de valor

<Not Applicable>

### Explicación

Argos prioritized 5 of the 15 categories that compose Scope 3 as relevant; this prioritization process was based on the results of the study developed by Quantis for Argos "Calculation of GHG emissions from Scope 3 prioritized sources of Cementos Argos" and on the guidelines given by the "Cement Sector Scope 3 GHG Accounting and Reporting Guidance" developed by the CSI (Cement Sustainability Initiative). The relevant categories calculated were: -Category 1: Purchased goods and services. - Category 3: Fuel and energy related activities. -Category 4: Upstream transportation and distribution. -Category 6: Business travel. -Category 9: Downstream transportation and distribution. Category 5 (Waste generated in operations) is usually not considered relevant for cement companies. Waste generated in operations (Category 5) was not selected as a relevant category considering the share of these emissions within the total Scope 3 emissions of the company.

## Viajes de negocios

### Estado de evaluación

Relevante, calculado

### Toneladas métricas de CO2e

1252

### Metodología de cálculo de las emisiones

For the Colombia and the United States regions, information was collected from the travel agencies that operate the logistics of corporate travel. For the calculation of the emissions of the Caribbean and Central America region, the Quantis SUITE 2.0 software was used, which works under the GHG Protocol methodology "Accounting and Reporting Standard for the Corporate Value Chain (Scope 3)" "Corporate Value Chain (Scope 3)" (World Business Council for Sustainable Development (WBCSD), World Resources Institute (WRI) (2011). Coverage: Cement, concrete and aggregates operations of COL, CCA and USA regions.

### Porcentaje de las emisiones calculado sobre la base de los datos obtenidos de proveedores o socios de la cadena de valor

80.87

### Explicación

Argos prioritized 5 categories as "Relevant" of the 15 categories that comprise the Scope 3. The prioritization process was based on the results of the study developed by Quantis for Argos, entitled "Calculation of Cementos Argos' GHG Emissions from Priority Sources of Scope 3 Emissions", in addition to the guidelines provided by the "Cement Sector Scope 3 GHG Accounting and Reporting Guidance", developed by the WBCSD - CSI. Category 6, Business Travel, was one of the 5 relevant categories. Of these 5 categories, Category 6 represented 0.03 % of total Scope 3 emissions in 2019.

## Viajes de los empleados al lugar de trabajo

### Estado de evaluación

No relevante, explicación provista

### Toneladas métricas de CO2e

<Not Applicable>

### Metodología de cálculo de las emisiones

<Not Applicable>

### Porcentaje de las emisiones calculado sobre la base de los datos obtenidos de proveedores o socios de la cadena de valor

<Not Applicable>

### Explicación

Argos prioritized 5 of the 15 categories that compose Scope 3 as relevant; this prioritization process was based on the results of the study developed by Quantis for Argos "Calculation of GHG emissions from Scope 3 prioritized sources of Cementos Argos" and on the guidelines given by the "Cement Sector Scope 3 GHG Accounting and Reporting Guidance" developed by the CSI (Cement Sustainability Initiative). The relevant categories calculated were: -Category 1: Purchased goods and services. -Category 3: Fuel and energy related activities. -Category 4: Upstream transportation and distribution. -Category 6: Business travel. -Category 9: Downstream transportation and distribution. Employee commuting (Category 7) was not selected as a relevant category considering the share of these emissions within the total Scope 3 emissions for the Company

## Activos alquilados upstream

### Estado de evaluación

No relevante, explicación provista

### Toneladas métricas de CO2e

<Not Applicable>

### Metodología de cálculo de las emisiones

<Not Applicable>

### Porcentaje de las emisiones calculado sobre la base de los datos obtenidos de proveedores o socios de la cadena de valor

<Not Applicable>

### Explicación

Argos prioritized 5 of the 15 categories that compose Scope 3 as relevant; this prioritization process was based on the results of the study developed by Quantis for Argos "Calculation of GHG emissions from Scope 3 prioritized sources of Cementos Argos" and on the guidelines given by the "Cement Sector Scope 3 GHG Accounting and Reporting Guidance" developed by the CSI (Cement Sustainability Initiative). The relevant categories calculated were: -Category 1: Purchased goods and services. -Category 3: Fuel and energy related activities. -Category 4: Upstream transportation and distribution. -Category 6: Business travel. -Category 9: Downstream transportation and distribution. According to the Cement Sector Scope 3 GHG Accounting and Reporting Guidance, Category 8 (Upstream leased assets) is usually not considered relevant for cement companies.

## Transporte y distribución downstream

### Estado de evaluación

Relevante, calculado

### Toneladas métricas de CO2e

80407

### Metodología de cálculo de las emisiones

For the Colombia region, information was collected from the companies Transportempo, Imbocar and Vigía, which are representative among the transportation suppliers of finished products. For the calculation of the emissions of the other two regions, the Quantis SUITE 2.0 software was used, which works under the GHG Protocol methodology "Accounting and Reporting Standard for the Corporate Value Chain (Scope 3)" (World Business Council for Sustainable Development (WBCSD) and World Resources Institute (WRI) (2011). Coverage: Cement, concrete and aggregates operations of Colombia, Caribbean and Central America and USA regions.

### Porcentaje de las emisiones calculado sobre la base de los datos obtenidos de proveedores o socios de la cadena de valor

31.21

### Explicación

The company worked to prioritize the most relevant of the 15 categories that make up Scope 3. This prioritization process was based on the guidelines in the "Cement Sector Scope 3 GHG Accounting and Reporting Guidance" developed by the Cement Sustainability Initiative (CSI), and its results identified Category 9, Downstream Transportation and Distribution, as one of the 5 relevant categories for its operations. Of these 5 categories, Category 9 represented 1.9% of total Scope 3 emissions in 2018

## Procesamiento de productos vendidos

### Estado de evaluación

No relevante, explicación provista

### Toneladas métricas de CO2e

<Not Applicable>

### Metodología de cálculo de las emisiones

<Not Applicable>

### Porcentaje de las emisiones calculado sobre la base de los datos obtenidos de proveedores o socios de la cadena de valor

<Not Applicable>

### Explicación

Argos prioritized 5 of the 15 categories that compose Scope 3 as relevant; this prioritization process was based on the results of the study developed by Quantis for Argos "Calculation of GHG emissions from Scope 3 prioritized sources of Cementos Argos" and on the guidelines given by the "Cement Sector Scope 3 GHG Accounting and Reporting Guidance" developed by the CSI (Cement Sustainability Initiative). The relevant categories calculated were: -Category 1: Purchased goods and services. -Category 3: Fuel and energy related activities. -Category 4: Upstream transportation and distribution. -Category 6: Business travel. -Category 9: Downstream transportation and distribution. According to the Cement Sector Scope 3 GHG Accounting and Reporting Guidance, category 10 (Processing of sold products) is usually not considered relevant for cement companies.

## Utilización de productos vendidos

### Estado de evaluación

No relevante, explicación provista

### Toneladas métricas de CO2e

<Not Applicable>

### Metodología de cálculo de las emisiones

<Not Applicable>

### Porcentaje de las emisiones calculado sobre la base de los datos obtenidos de proveedores o socios de la cadena de valor

<Not Applicable>

### Explicación

Argos prioritized 5 of the 15 categories that compose Scope 3 as relevant; this prioritization process was based on the results of the study developed by Quantis for Argos "Calculation of GHG emissions from Scope 3 prioritized sources of Cementos Argos" and on the guidelines given by the "Cement Sector Scope 3 GHG Accounting and Reporting Guidance" developed by the CSI (Cement Sustainability Initiative). The relevant categories calculated were: -Category 1: Purchased goods and services. -Category 3: Fuel and energy related activities. -Category 4: Upstream transportation and distribution. -Category 6: Business travel. -Category 9: Downstream transportation and distribution. According to the Cement Sector Scope 3 GHG Accounting and Reporting Guidance, Category 11 (Use of sold products) is usually not considered relevant for cement companies

## Tratamiento al final de la vida útil de los productos vendidos

### Estado de evaluación

No relevante, explicación provista

### Toneladas métricas de CO2e

<Not Applicable>

### Metodología de cálculo de las emisiones

<Not Applicable>

### Porcentaje de las emisiones calculado sobre la base de los datos obtenidos de proveedores o socios de la cadena de valor

<Not Applicable>

### Explicación

Argos prioritized 5 of the 15 categories that compose Scope 3 as relevant; this prioritization process was based on the results of the study developed by Quantis for Argos "Calculation of GHG emissions from Scope 3 prioritized sources of Cementos Argos" and on the guidelines given by the "Cement Sector Scope 3 GHG Accounting and Reporting Guidance" developed by the CSI (Cement Sustainability Initiative). The relevant categories calculated were: -Category 1: Purchased goods and services. -Category 3: Fuel and energy related activities. -Category 4: Upstream transportation and distribution. -Category 6: Business travel. -Category 9: Downstream transportation and distribution. According to the Cement Sector Scope 3 GHG Accounting and Reporting Guidance, Category 12 (End of life treatment of sold products) is usually not considered relevant for cement companies

## Activos alquilados downstream

### Estado de evaluación

No relevante, explicación provista

### Toneladas métricas de CO2e

<Not Applicable>

### Metodología de cálculo de las emisiones

<Not Applicable>

### Porcentaje de las emisiones calculado sobre la base de los datos obtenidos de proveedores o socios de la cadena de valor

<Not Applicable>

### Explicación

Argos prioritized 5 of the 15 categories that compose Scope 3 as relevant; this prioritization process was based on the results of the study developed by Quantis for Argos "Calculation of GHG emissions from Scope 3 prioritized sources of Cementos Argos" and on the guidelines given by the "Cement Sector Scope 3 GHG Accounting and Reporting Guidance" developed by the CSI (Cement Sustainability Initiative). The relevant categories calculated were: -Category 1: Purchased goods and services. -Category 3: Fuel and energy related activities. -Category 4: Upstream transportation and distribution. -Category 6: Business travel. -Category 9: Downstream transportation and distribution. According to the Cement Sector Scope 3 GHG Accounting and Reporting Guidance, Category 13 (Downstream leased assets) is usually not considered relevant for cement companies.

## Franquicias

### Estado de evaluación

No relevante, explicación provista

### Toneladas métricas de CO2e

<Not Applicable>

### Metodología de cálculo de las emisiones

<Not Applicable>

### Porcentaje de las emisiones calculado sobre la base de los datos obtenidos de proveedores o socios de la cadena de valor

<Not Applicable>

### Explicación

Argos prioritized 5 of the 15 categories that compose Scope 3 as relevant; this prioritization process was based on the results of the study developed by Quantis for Argos "Calculation of GHG emissions from Scope 3 prioritized sources of Cementos Argos" and on the guidelines given by the "Cement Sector Scope 3 GHG Accounting and Reporting Guidance" developed by the CSI (Cement Sustainability Initiative). The relevant categories calculated were: -Category 1: Purchased goods and services. -Category 3: Fuel and energy related activities. -Category 4: Upstream transportation and distribution. -Category 6: Business travel. -Category 9: Downstream transportation and distribution. According to the Cement Sector Scope 3 GHG Accounting and Reporting Guidance, Category 14 (Franchises) is usually not considered relevant for cement companies.

## Inversiones

### Estado de evaluación

No relevante, explicación provista

### Toneladas métricas de CO2e

<Not Applicable>

### Metodología de cálculo de las emisiones

<Not Applicable>

### Porcentaje de las emisiones calculado sobre la base de los datos obtenidos de proveedores o socios de la cadena de valor

<Not Applicable>

### Explicación

Argos prioritized 5 of the 15 categories that compose Scope 3 as relevant; this prioritization process was based on the results of the study developed by Quantis for Argos "Calculation of GHG emissions from Scope 3 prioritized sources of Cementos Argos" and on the guidelines given by the "Cement Sector Scope 3 GHG Accounting and Reporting Guidance" developed by the CSI (Cement Sustainability Initiative). The relevant categories calculated were: -Category 1: Purchased goods and services. -Category 3: Fuel and energy related activities. -Category 4: Upstream transportation and distribution. -Category 6: Business travel. -Category 9: Downstream transportation and distribution. According to the Cement Sector Scope 3 GHG Accounting and Reporting Guidance, Category 15 (Investments) is usually not considered relevant for cement companies.

## Otros (upstream)

### Estado de evaluación

No relevante, explicación provista

### Toneladas métricas de CO2e

<Not Applicable>

### Metodología de cálculo de las emisiones

<Not Applicable>

### Porcentaje de las emisiones calculado sobre la base de los datos obtenidos de proveedores o socios de la cadena de valor

<Not Applicable>

### Explicación

Argos worked with Quantis to prioritize the most relevant of the 15 categories that make up Scope 3. This prioritization process was based on the guidelines in the "Cement Sector Scope 3 GHG Accounting and Reporting Guidance" developed by the Cement Sustainability Initiative (CSI), and did not identify any other upstream sources of scope 3 emissions as relevant for Argos' operations.

## Otros (downstream)

### Estado de evaluación

No relevante, explicación provista

### Toneladas métricas de CO2e

<Not Applicable>

### Metodología de cálculo de las emisiones

<Not Applicable>

### Porcentaje de las emisiones calculado sobre la base de los datos obtenidos de proveedores o socios de la cadena de valor

<Not Applicable>

### Explicación

Argos worked with Quantis to prioritize the most relevant of the 15 categories that make up Scope 3. This prioritization process was based on the guidelines in the "Cement Sector Scope 3 GHG Accounting and Reporting Guidance" developed by the Cement Sustainability Initiative (CSI), and did not identify any other downstream sources of scope 3 emissions as relevant for Argos' operations.

## C6.7

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### (C6.7) ¿Las emisiones de dióxido de carbono provenientes del carbono biogénico son relevantes para su organización?

No

## C6.10

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### (C6.10) Describa sus emisiones globales brutas combinadas del alcance 1 y 2 para el año de informe en toneladas métricas de CO2e por ingresos totales por unidad monetaria y proporcione las métricas de intensidad adicionales adecuadas para sus operaciones comerciales.

#### Cifra de intensidad

0.0000010203

#### Numerador métrico (Emisiones combinadas globales brutas del alcance 1 y el alcance 2, toneladas métricas de CO2e)

9159953

#### Denominador métrico

ingreso total por unidad

#### Denominador métrico: Total unitario

9375076000000

#### Cifra de alcance 2 utilizada

Basada en localización

**% de cambio desde el año anterior**

3.49

**Dirección del cambio**

Disminuyó

**Motivo del cambio**

This intensity figure was calculated as follow:  $9159953 \text{ tCO}_2 / (9375076000000 \text{ COP} * 95.76\%) = 0.0000010203$  In 2019 compared to 2018, there was a decrease of 3.49% in the CO<sub>2e</sub> emissions per unit of revenue (scope 1+2 divided total revenues according to coverage of the indicator by revenues, which was 95.76%). There was an increase of 4.68% in the total scope 1+2 emissions of the company compared to the previous year, mainly due to the increase in scope 1 and 2 of CO<sub>2</sub> emissions from cement operations, which contribute with the 94% and 97% in the company's scope 1 and 2 emissions, respectively. This rise in CO<sub>2</sub> emissions from cement operations was proportional to the increase in clinker production. Likewise, revenues increased in a percentage of 11.37 compared to 2018. This increase in revenues is due to several factors: we achieved significant growth in cement volume in the United States, where there is attractive investment environment and a good momentum of the economy; likewise, we achieved a significant price recovery in Colombia, supported by a positive increase in the demand of the market and the growing preference of the Argos value proposition, both in the retail and industrial markets. Even if we faced important challenges due in the economies of Honduras and Panama, but we were able to offset, to some extent, the impact on the results in Central America and the Caribbean with the growth of exports and the positive performance of our operations in the Dominican Republic and Haiti.

**Cifra de intensidad**

0.628

**Numerador métrico (Emisiones combinadas globales brutas del alcance 1 y el alcance 2, toneladas métricas de CO<sub>2e</sub>)**

8057886

**Denominador métrico**

Otro. Especifique. (metric tonnes of cementitious product)

**Denominador métrico: Total unitario**

12833474

**Cifra de alcance 2 utilizada**

Basada en localización

**% de cambio desde el año anterior**

1.87

**Dirección del cambio**

Aumentó

**Motivo del cambio**

Net specific CO<sub>2</sub> emissions per tonne of cementitious material increased by 1.87% with respect to 2018. This is due to the fact that absolute net CO<sub>2</sub> emissions increased in higher proportion than the cementitious material production increased. This increase in the intensity of CO<sub>2</sub> emissions for cementitious production occurred mainly due to: - A slight increase in the clinker cement factor of the company (corresponding to 0.4 percentage points) - A small increase of 0.8% in the specific heat consumption for the clinker production at company level. - A slight decrease of 1 percentage point in natural gas in the fuel mix of the company kilns. This indicator is calculated according to the methodology determined by the Cement Sustainability Initiative (CSI) of the World Business Council for Sustainable Development (WBCSD): "The Cement CO<sub>2</sub> and Energy Protocol - CO<sub>2</sub> and Energy Accounting and Reporting Standard for the Cement Industry" (2011). This indicator corresponds to the variable 74 calculated by the methodology described: - Numerator: Net direct CO<sub>2</sub> emissions (Total CO<sub>2</sub> emissions, excluding CO<sub>2</sub> emissions from in situ power generation and CO<sub>2</sub> emissions generated by the consumption of alternative fuels). It corresponds to the variable 71 of the calculation of the "CO<sub>2</sub> and Energy Accounting and Reporting Standard for the Cement Industry - Cement CO<sub>2</sub> and Energy Protocol." - Denominator: Cementitious material production. It corresponds to variable 21a of the calculation of the "CO<sub>2</sub> and Energy Accounting and Reporting Standard for the Cement Industry - Cement CO<sub>2</sub> and Energy Protocol." Coverage: Cement operations of the Colombia, Caribbean and Central America and United States regions.

**Cifra de intensidad**

0.0149

**Numerador métrico (Emisiones combinadas globales brutas del alcance 1 y el alcance 2, toneladas métricas de CO<sub>2e</sub>)**

139533

**Denominador métrico**

Otro. Especifique. (Cubic meter of concrete)

**Denominador métrico: Total unitario**

9380260

**Cifra de alcance 2 utilizada**

Basada en localización

**% de cambio desde el año anterior**

8.76

**Dirección del cambio**

Aumentó

**Motivo del cambio**

There was an increase of 8.76% in the CO<sub>2</sub> emissions intensity by m<sup>3</sup> of concrete in the concrete business because its total CO<sub>2</sub> emissions (scope 1+2) increased by 7%, however its concrete production decreased 1%. The increase of scope 1+2 emissions in concrete production was moved by the performance of USA region operations (which contributes 74% of the scope 1+2 emissions of the concrete business). This region had an increase in concrete production proportional to its scope 1+2 emissions. The rise concrete production in this region has been driven by the good answer of market, due to the positive outlook for the construction sector, which is supported by important infrastructure, housing and commercial projects.

**Cifra de intensidad**

0.0021

**Numerador métrico (Emisiones combinadas globales brutas del alcance 1 y el alcance 2, toneladas métricas de CO<sub>2e</sub>)**

4760

**Denominador métrico**

Otro. Especifique. (tonne of aggregate)

**Denominador métrico: Total unitario**

2314969

**Cifra de alcance 2 utilizada**

Basada en localización

**% de cambio desde el año anterior**

11.87

**Dirección del cambio**

Disminuyó

**Motivo del cambio**

There was a decrease of 11.87% in the CO2 emissions intensity by metric tonne of aggregate in the aggregates business due to the fact that both its total CO2 emissions (scope 1+2) and production decreased, even the emissions were reduced in a greater proportion than production. The decrease in this intensity indicator was moved by the performance of Colombia region. The aggregates production of the Colombia region represents 89% of the total production of this material in the company. In this region, direct CO2 emissions decreased mainly by improvements in machinery fuel consumption. Likewise, in this same region there was a decrease in indirect emissions due to the reduction in the CO2 emission factor of the national electricity grid, which went from 158 to 114 kgCO2/MWh

**C-CE6.11****(C-CE6.11) Indique las intensidades de emisiones de alcance 1 y alcance 2 relacionadas con las actividades de producción de cemento.**

	Intensidad de emisiones bruta de alcance 1, toneladas métricas de CO2e por tonelada métrica	Intensidad de emisiones neta de alcance 1, toneladas métricas de CO2e por tonelada métrica	Alcance 2, intensidad de emisiones basadas en la localización, toneladas métricas de CO2e por tonelada métrica
Clinker	0.861	0.847	0.046
Equivalente de cemento	0.675	0.665	0.036
Productos cementeros	0.638	0.628	0.034
Materiales con bajo CO2	0	0	0

**C7. Desglose de emisiones****C7.1****(C7.1) ¿Su organización desglosa sus emisiones de alcance 1 por tipo de gas de efecto invernadero?**

No

**C7.2****(C7.2) Desglose sus cifras globales brutas totales de emisiones de alcance 1 por país/región**

País/Región	Emisiones de alcance 1 (toneladas métricas de CO2e)
Colombia	4338152
Estados Unidos de América	3705354
Panamá	5897
Honduras	426967
República Dominicana	2057
Surinam	305
Haití	17122
Puerto Rico	217642
Guyana	135

**C7.3****(C7.3) Indique qué desglose de emisiones brutas globales de alcance 1 puede proporcionar.**

Por división de la empresa

Por actividad

### C7.3a

(C7.3a) Desglose sus cifras globales brutas totales de emisiones de alcance 1 por división de la empresa.

División de la empresa	Emisiones de alcance 1 (tonelada métricas de CO2e)
Colombia regional	4338152
Caribbean and Central America regional	670125
USA regional	3705354

### C7.3c

(C7.3c) Desglose sus cifras globales brutas totales de emisiones de alcance 1 por actividad comercial.

Actividad	Emisiones de alcance 1 (toneladas métricas de CO2e)
Cement production	8186930
Concrete	126796
Own-energy production for processes supply	395896
Aggregates	4009

C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Detalle las emisiones de alcance 1 brutas totales y globales de su empresa por actividad productiva de sector en toneladas métricas de CO2e.

	Emisiones brutas de alcance 1, en toneladas métricas de CO2e	Emisiones netas de alcance 1, en toneladas métricas de CO2e	Comentario
Actividades de producción de cemento	8186930	8057886	- Gross Scope 1 emissions: Direct CO2 gross emissions (corresponding to GRI 305-1) for cement operations. Also, this indicator corresponds to KPI number 59c of the methodology established by the Cement Sustainability Initiative, in the "CO2 and Energy Accounting and Reporting Standard for the Cement Industry - Cement CO2 and Energy Protocol" (WBCSD - CSI, 2011). The definition of this indicator is: Total direct emissions from raw materials, kiln fuels and non-kiln fuels; excluding CO2 from on-site power generation. Coverage by Argos: Cement operations in the Colombia, Caribbean & Central America, and United States regions. - Net Scope 1 emissions: Direct CO2 net emissions for cement operations. This indicator corresponds to KPI number 71 of the methodology established by the Cement Sustainability Initiative, in the "CO2 and Energy Accounting and Reporting Standard for the Cement Industry - Cement CO2 and Energy Protocol" (WBCSD - CSI, 2011). The definition of this indicator is: Total direct emissions from raw materials, kiln fuels and non-kiln fuels, excluding CO2 from on-site power generation, minus alternative fossil fuels. Coverage by Argos: Cement operations in the Colombia, Caribbean & Central America, and United States regions.
Actividades de producción de sustancias químicas	<Not Applicable >	<Not Applicable >	<Not Applicable>
Actividades de producción de carbón	<Not Applicable >	<Not Applicable >	<Not Applicable>
Actividades de empresas de energía eléctrica	<Not Applicable >	<Not Applicable >	<Not Applicable>
Actividades de producción de metales y minería	<Not Applicable >	<Not Applicable >	<Not Applicable>
Actividades de producción de petróleo y gas (upstream)	<Not Applicable >	<Not Applicable >	<Not Applicable>
Actividades de producción de petróleo y gas (midstream)	<Not Applicable >	<Not Applicable >	<Not Applicable>
Actividades de producción de petróleo y gas (downstream)	<Not Applicable >	<Not Applicable >	<Not Applicable>
Actividades de producción de acero	<Not Applicable >	<Not Applicable >	<Not Applicable>
Actividades de transporte OEM	<Not Applicable >	<Not Applicable >	<Not Applicable>
Actividades de servicios de transporte	<Not Applicable >	<Not Applicable >	<Not Applicable>

## C7.5

(C7.5) Desglose sus cifras globales brutas totales de emisiones de alcance 2 por país/región.

País/Región	Alcance 2, con base en la localización (toneladas métricas de CO2e)	Alcance 2, con base en el mercado (toneladas métricas de CO2e)	Electricidad, calor o refrigeración comprados y consumidos (MWh)	Electricidad, calor, vapor o refrigeración con bajo nivel de carbono comprados y consumidos que están contabilizados en el enfoque de emisiones de alcance 2 basadas en el mercado (MWh)
Colombia	32511		278630	
Estados Unidos de América	339671		752314	
Panamá	10724		30039	
Honduras	32969		88864	
República Dominicana	15640		21050	
Surinam	872		3071	
Haití	0		0	
Puerto Rico	13012		45815	
Guyana	923		3249	

## C7.6

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**(C7.6) Indique qué desglose de emisiones brutas globales de Alcance 2 puede proporcionar.**

Por división de la empresa  
Por actividad

### C7.6a

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**(C7.6a) Desglose sus cifras globales brutas totales de emisiones de alcance 2 por división de la empresa.**

División de la empresa	Alcance 2, con base en la localización (toneladas métricas de CO2e)	Alcance 2, con base en el mercado (toneladas métricas de CO2e)
Colombia regional	32511	
Caribbean and Central America regional	74140	
USA regional	339671	

### C7.6c

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**(C7.6c) Desglose sus cifras globales brutas totales de emisiones de alcance 2 por actividad comercial.**

Actividad	Alcance 2, con base en la localización (toneladas métricas de CO2e)	Alcance 2, con base en el mercado (toneladas métricas de CO2e)
Cement production	432834	
Concrete	12737	
Aggregates	752	

C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7

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**(C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7) Desglose las emisiones brutas totales y globales de alcance 2 de su empresa por actividad productiva de sector en toneladas métricas de CO2e.**

	Alcance 2, con base en la localización, toneladas métricas de CO2e	Alcance 2, basada en el mercado (en caso de corresponder), en toneladas métricas de CO2e	Comentario
Actividades de producción de cemento	432834		This indicator corresponds to indirect (scope 2) GHG emissions (corresponding to GRI 305-2) for cement business activity. Also, this indicator corresponds to KPI number 49a of the methodology established by the Cement Sustainability Initiative, in the "CO2 and Energy Accounting and Reporting Standard for the Cement Industry - Cement CO2 and Energy Protocol" (WBCSD - CSI, 2011). The definition of this indicator is: CO2 from external power generation. Coverage by Argos: Cement operations in the Colombia, Caribbean & Central America, and United States regions.
Actividades de producción de sustancias químicas	<Not Applicable>	<Not Applicable>	<Not Applicable>
Actividades de producción de carbón	<Not Applicable>	<Not Applicable>	<Not Applicable>
Actividades de producción de metales y minería	<Not Applicable>	<Not Applicable>	<Not Applicable>
Actividades de producción de petróleo y gas (upstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Actividades de producción de petróleo y gas (midstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Actividades de producción de petróleo y gas (downstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Actividades de producción de acero	<Not Applicable>	<Not Applicable>	<Not Applicable>
Actividades de transporte OEM	<Not Applicable>	<Not Applicable>	<Not Applicable>
Actividades de servicios de transporte	<Not Applicable>	<Not Applicable>	<Not Applicable>

**C7.9**

**(C7.9) ¿Cómo se comparan sus emisiones globales brutas (de alcance 1 y 2 en conjunto) del año del informe con las del año de informe anterior?**  
Aumentó

**C7.9a**

**(C7.9a) Identifique los motivos de cualquier cambio en sus emisiones globales brutas (de alcance 1 y 2 en conjunto) y por cada uno de ellos especifique cómo se comparan sus emisiones con las del año anterior**

	Cambio en las emisiones (toneladas métricas de CO2e)	Dirección del cambio	Valor de emisiones (porcentaje)	Explique el cálculo
Cambio en el consumo de energía renovable		<Not Applicable >		
Otras actividades de reducción de emisiones		<Not Applicable >		
Desinversión		<Not Applicable >		
Adquisiciones		<Not Applicable >		
Fusiones		<Not Applicable >		
Cambio en los resultados	555365	Aumentó	6.35	In 2019 there was an increase of 555365 tCO2 compared to 2018, due to the following reasons: • The opening of concrete plants (fixed and mobiles) in Colombia Region in order to meet the demand of the market for these products. • Several mobile concrete facilities were closed due to projects that were supplied by these plants were finished. These facilities are temporary since their lifetime depend on duration of the project. • There was an increased production in some plants of cement, concrete and aggregates, but specially in some cement plants located at USA region. • However, there was also a decreased production in some plants due to the reduction in demand in some markets, Therefore, last year CO2 emissions increased 555365 tCO2e compared to 2018 due to change in output. The total Scope 1 and Scope 2 emissions in 2018 were 8,750,562 tCO2, therefore, the emissions increased 6.35% due to change in output ( $555365 / 8750562 * 100 = 6.35\%$ )
Cambio en la metodología	34675	Disminuyó	0.4	In 2019 there was a decrease of 34675 tonnes of CO2 due to the reduction in CO2 emission factor associated to the electricity purchase from the national grid (kgCO2/MWh) for Colombia and USA. The total Scope 1 and Scope 2 emissions in 2018 were 8,750,562 tCO2, therefore, the emissions decreased 0.40% due to change in methodology: $-34675 / 8750562 * 100 = -0.40\%$
Cambio en los límites		<Not Applicable >		
Cambio en las condiciones operativas físicas		<Not Applicable >		
No identificado		<Not Applicable >		
Otro	110262	Disminuyó	1.26	In 2019 there were efficiencies in some Argos operations, which moved the reduction of total CO2 emissions even when there was an increase in production in those operations. Therefore, 110262 tCO2e decreased in 2019 compared to 2018 due to efficiencies in some operations. It represented a decrease of 1.26% ( $110262 / 8750562 * 100 = 1.26\%$ )

## C7.9b

**(C7.9b) ¿El cálculo del desempeño de emisiones en C7.9 y C7.9a se fundamenta en una cifra de emisiones de alcance 2 basadas en la ubicación o basadas en el mercado?**

Basada en localización

## C8. Energía

### C8.1

**(C8.1) ¿Qué porcentaje de su gasto operacional total del año de reporte se destinó a energía?**

Más de 25% pero menos o igual a 30%

### C8.2

**(C8.2) Seleccione qué actividades relacionadas con la energía ha implementado su organización.**

	Indique si su organización implementó esta actividad relacionada con la energía en el año de informe
Consumo de combustible (sin incluir materias primas)	Sí
Consumo de electricidad comprada o adquirida	Sí
Consumo de calor comprado o adquirido	No
Consumo de vapor comprado o adquirido	No
Consumo de refrigeración comprada o adquirida	No
Generación de electricidad, calor, vapor o refrigeración	Sí

**C8.2a****(C8.2a) Informe los totales de consumo de su organización (sin incluir las materias primas) en MWh.**

	Valor calórico	MWh de fuentes renovables	MWh de fuentes no renovables	Total de MWh (renovables y no renovables)
Consumo de combustible (sin incluir materias primas)	LHV (Valor calórico menor)	550993	10123963	10674957
Consumo de electricidad comprada o adquirida	<Not Applicable>	326157	896876	1223032
Consumo de calor comprado o adquirido	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumo de vapor comprado o adquirido	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumo de refrigeración comprada o adquirida	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumo de energía renovable no combustible propia	<Not Applicable>		<Not Applicable>	
Consumo total de energía	<Not Applicable>	877150	12368809	13245959

**C-CE8.2a****(C-CE8.2a) Informe el consumo de energía total en MWh de su empresa (sin incluir las materias primas) para las actividades de producción de cemento.**

	Valor calórico	MWh totales
Consumo de combustible (sin incluir materias primas)	LHV (Valor calórico menor)	11532581
Consumo de electricidad comprada o adquirida	<Not Applicable>	1559688
Consumo de otra energía comprada o adquirida (calor, vapor y/o refrigeración)	<Not Applicable>	<Not Applicable>
Consumo total de energía	<Not Applicable>	13092269

**C8.2b****(C8.2b) Seleccione las aplicaciones del consumo de combustible de su organización.**

	Indique si su organización implementa esta aplicación del combustible
Consumo de combustible para la generación de electricidad	Sí
Consumo de combustible para la generación de calor	Sí
Consumo de combustible para la generación de vapor	No
Consumo de combustible para la generación de refrigeración	No
Consumo de combustible por cogeneración o tri generación	No

**C8.2c****(C8.2c) Indique cuánto combustible en MWh ha consumido su organización (sin incluir materias primas) por tipo de combustible.****Combustibles (excluye materias primas)**

Carbón

**Valor calórico**

LHV (Valor calórico menor)

**MWh de combustible total consumido por la organización**

7050853

**MWh de combustible consumido para la generación automática de electricidad**

769608

**MWh de combustible consumido para la autogeneración de calor**

6281245

**MWh de combustible consumido para la autogeneración de vapor**

&lt;Not Applicable&gt;

**MWh de combustible consumido para la autogeneración de refrigeración**

<Not Applicable>

**MWh de combustible consumido para la autogeneración o la auto-trigeneración**

<Not Applicable>

**Factor de emisión**

96

**Unidad**

kg de CO2 por GJ

**Fuente del factor de emisión**

IPCC 2006, 2006 IPCC Guidelines for National Greenhouse Gas.

**Comentario**

Cement operations

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**Combustibles (excluye materias primas)**

Gas natural

**Valor calórico**

LHV (Valor calórico menor)

**MWh de combustible total consumido por la organización**

3046859

**MWh de combustible consumido para la generación automática de electricidad**

562353

**MWh de combustible consumido para la autogeneración de calor**

2484506

**MWh de combustible consumido para la autogeneración de vapor**

<Not Applicable>

**MWh de combustible consumido para la autogeneración de refrigeración**

<Not Applicable>

**MWh de combustible consumido para la autogeneración o la auto-trigeneración**

<Not Applicable>

**Factor de emisión**

56.1

**Unidad**

kg de CO2 por GJ

**Fuente del factor de emisión**

IPCC 2006, 2006 IPCC Guidelines for National Greenhouse Gas.

**Comentario**

Cement operations and self-generation of electricity.

---

**Combustibles (excluye materias primas)**

Diésel

**Valor calórico**

LHV (Valor calórico menor)

**MWh de combustible total consumido por la organización**

748623

**MWh de combustible consumido para la generación automática de electricidad**

52530

**MWh de combustible consumido para la autogeneración de calor**

696093

**MWh de combustible consumido para la autogeneración de vapor**

<Not Applicable>

**MWh de combustible consumido para la autogeneración de refrigeración**

<Not Applicable>

**MWh de combustible consumido para la autogeneración o la auto-trigeneración**

<Not Applicable>

**Factor de emisión**

74.1

**Unidad**

kg de CO2 por GJ

**Fuente del factor de emisión**

IPCC 2006, 2006 IPCC Guidelines for National Greenhouse Gas.

**Comentario**

Operations: Cement, Concrete, Aggregates and self-generation of electricity.

---

**Combustibles (excluye materias primas)**

Neumáticos

**Valor calórico**

LHV (Valor calórico menor)

**MWh de combustible total consumido por la organización**

94871

**MWh de combustible consumido para la generación automática de electricidad**

0

**MWh de combustible consumido para la autogeneración de calor**

94871

**MWh de combustible consumido para la autogeneración de vapor**

<Not Applicable>

**MWh de combustible consumido para la autogeneración de refrigeración**

<Not Applicable>

**MWh de combustible consumido para la autogeneración o la auto-trigeneración**

<Not Applicable>

**Factor de emisión**

85

**Unidad**

kg de CO2 por GJ

**Fuente del factor de emisión**

World Business Council for Sustainable Development – Cement Sustainability Initiative (CSI).

**Comentario**

Cement operations.

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**Combustibles (excluye materias primas)**

Combustible alternativo para horno (Residuos)

**Valor calórico**

LHV (Valor calórico menor)

**MWh de combustible total consumido por la organización**

456122

**MWh de combustible consumido para la generación automática de electricidad**

0

**MWh de combustible consumido para la autogeneración de calor**

456122

**MWh de combustible consumido para la autogeneración de vapor**

<Not Applicable>

**MWh de combustible consumido para la autogeneración de refrigeración**

<Not Applicable>

**MWh de combustible consumido para la autogeneración o la auto-trigeneración**

<Not Applicable>

**Factor de emisión**

80

**Unidad**

kg de CO2 por GJ

**Fuente del factor de emisión**

World Business Council for Sustainable Development – Cement Sustainability Initiative (CSI).

**Comentario**

Cement operations

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**Combustibles (excluye materias primas)**

Gasolina para motor

**Valor calórico**

LHV (Valor calórico menor)

**MWh de combustible total consumido por la organización**

3499

**MWh de combustible consumido para la generación automática de electricidad**

0

**MWh de combustible consumido para la autogeneración de calor**

3499

**MWh de combustible consumido para la autogeneración de vapor**

<Not Applicable>

**MWh de combustible consumido para la autogeneración de refrigeración**

<Not Applicable>

---

**MWh de combustible consumido para la autogeneración o la auto-trigeneración**

<Not Applicable>

**Factor de emisión**

69.3

**Unidad**

kg de CO2 por GJ

**Fuente del factor de emisión**

IPCC 2006, 2006 IPCC Guidelines for National Greenhouse Gas.

**Comentario**

Operations: Cement, Concrete, Aggregates.

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**Combustibles (excluye materias primas)**

Fueloil número 1

**Valor calórico**

LHV (Valor calórico menor)

**MWh de combustible total consumido por la organización**

26204

**MWh de combustible consumido para la generación automática de electricidad**

8392

**MWh de combustible consumido para la autogeneración de calor**

17811

**MWh de combustible consumido para la autogeneración de vapor**

<Not Applicable>

**MWh de combustible consumido para la autogeneración de refrigeración**

<Not Applicable>

**MWh de combustible consumido para la autogeneración o la auto-trigeneración**

<Not Applicable>

**Factor de emisión**

77.4

**Unidad**

kg de CO2 por GJ

**Fuente del factor de emisión**

IPCC 2006, 2006 IPCC Guidelines for National Greenhouse Gas.

**Comentario**

Cement operations

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**Combustibles (excluye materias primas)**

Coque de petróleo

**Valor calórico**

LHV (Valor calórico menor)

**MWh de combustible total consumido por la organización**

639757

**MWh de combustible consumido para la generación automática de electricidad**

0

**MWh de combustible consumido para la autogeneración de calor**

639757

**MWh de combustible consumido para la autogeneración de vapor**

<Not Applicable>

**MWh de combustible consumido para la autogeneración de refrigeración**

<Not Applicable>

**MWh de combustible consumido para la autogeneración o la auto-trigeneración**

<Not Applicable>

**Factor de emisión**

92.8

**Unidad**

kg de CO2 por GJ

**Fuente del factor de emisión**

World Business Council for Sustainable Development – Cement Sustainability Initiative (CSI).

**Comentario**

Cement operations.

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**Combustibles (excluye materias primas)**

Gas propano

---

**Valor calórico**

LHV (Valor calórico menor)

**MWh de combustible total consumido por la organización**

1054

**MWh de combustible consumido para la generación automática de electricidad**

0

**MWh de combustible consumido para la autogeneración de calor**

1054

**MWh de combustible consumido para la autogeneración de vapor**

&lt;Not Applicable&gt;

**MWh de combustible consumido para la autogeneración de refrigeración**

&lt;Not Applicable&gt;

**MWh de combustible consumido para la autogeneración o la auto-trigeneración**

&lt;Not Applicable&gt;

**Factor de emisión**

67.2

**Unidad**

kg de CO2 por GJ

**Fuente del factor de emisión**

Factores de Emisión de los Combustibles Colombianos (FECOC) – Unidad de Planeación Minero Energética (UPME). 2016.

**Comentario**

Cement operation

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**C-CE8.2c**

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**(C-CE8.2c) Indique cuánto combustible en MWh ha consumido su organización (sin incluir materias primas) por combustible para actividades de producción de cemento.****Combustibles (excluye materias primas)**

Carbón

**Valor calórico**

LHV

**MWh totales de combustible consumidos para actividades de producción de cemento**

7050853

**MWh de combustible consumidos en el horno**

6281245

**MWh de combustible consumidos para la generación de calor que no se utiliza en el horno**

0

**MWh de combustible consumidos para la autogeneración de electricidad**

759608

**MWh de combustible consumido para la autogeneración o la auto-trigeneración**

&lt;Not Applicable&gt;

---

**Combustibles (excluye materias primas)**

Gas natural

**Valor calórico**

LHV

**MWh totales de combustible consumidos para actividades de producción de cemento**

3001944

**MWh de combustible consumidos en el horno**

2484504

**MWh de combustible consumidos para la generación de calor que no se utiliza en el horno**

0

**MWh de combustible consumidos para la autogeneración de electricidad**

517439

**MWh de combustible consumido para la autogeneración o la auto-trigeneración**

&lt;Not Applicable&gt;

---

**Combustibles (excluye materias primas)**

Diésel

**Valor calórico**

LHV

**MWh totales de combustible consumidos para actividades de producción de cemento**  
258277

**MWh de combustible consumidos en el horno**  
0

**MWh de combustible consumidos para la generación de calor que no se utiliza en el horno**  
205747

**MWh de combustible consumidos para la autogeneración de electricidad**  
52530

**MWh de combustible consumido para la autogeneración o la auto-trigeneración**  
<Not Applicable>

---

**Combustibles (excluye materias primas)**  
Neumáticos

**Valor calórico**  
LHV

**MWh totales de combustible consumidos para actividades de producción de cemento**  
94871

**MWh de combustible consumidos en el horno**  
94871

**MWh de combustible consumidos para la generación de calor que no se utiliza en el horno**  
0

**MWh de combustible consumidos para la autogeneración de electricidad**  
0

**MWh de combustible consumido para la autogeneración o la auto-trigeneración**  
<Not Applicable>

---

**Combustibles (excluye materias primas)**  
Combustible alternativo para horno (Residuos)

**Valor calórico**  
LHV

**MWh totales de combustible consumidos para actividades de producción de cemento**  
456122

**MWh de combustible consumidos en el horno**  
456122

**MWh de combustible consumidos para la generación de calor que no se utiliza en el horno**  
0

**MWh de combustible consumidos para la autogeneración de electricidad**  
0

**MWh de combustible consumido para la autogeneración o la auto-trigeneración**  
<Not Applicable>

---

**Combustibles (excluye materias primas)**  
Gasolina para motor

**Valor calórico**  
LHV

**MWh totales de combustible consumidos para actividades de producción de cemento**  
3499

**MWh de combustible consumidos en el horno**  
0

**MWh de combustible consumidos para la generación de calor que no se utiliza en el horno**  
3499

**MWh de combustible consumidos para la autogeneración de electricidad**  
0

**MWh de combustible consumido para la autogeneración o la auto-trigeneración**  
<Not Applicable>

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**Combustibles (excluye materias primas)**  
Fueloil número 1

**Valor calórico**  
LHV

**MWh totales de combustible consumidos para actividades de producción de cemento**  
26204

**MWh de combustible consumidos en el horno**  
17811

---

MWh de combustible consumidos para la generación de calor que no se utiliza en el horno

0

MWh de combustible consumidos para la autogeneración de electricidad

8392

MWh de combustible consumido para la autogeneración o la auto-trigeneración

<Not Applicable>

---

**Combustibles (excluye materias primas)**

Coque de petróleo

**Valor calórico**

LHV

MWh totales de combustible consumidos para actividades de producción de cemento

639757

MWh de combustible consumidos en el horno

639757

MWh de combustible consumidos para la generación de calor que no se utiliza en el horno

0

MWh de combustible consumidos para la autogeneración de electricidad

0

MWh de combustible consumido para la autogeneración o la auto-trigeneración

<Not Applicable>

---

**Combustibles (excluye materias primas)**

Gas propano

**Valor calórico**

LHV

MWh totales de combustible consumidos para actividades de producción de cemento

1054

MWh de combustible consumidos en el horno

0

MWh de combustible consumidos para la generación de calor que no se utiliza en el horno

1054

MWh de combustible consumidos para la autogeneración de electricidad

0

MWh de combustible consumido para la autogeneración o la auto-trigeneración

<Not Applicable>

## C8.2d

(C8.2d) Proporcione detalles sobre la electricidad, calor, vapor y refrigeración que su organización ha generado y consumido durante el año de informe.

	Generación bruta total (MWh)	Generación consumida por la organización (MWh)	Generación bruta de fuentes renovables (MWh)	Generación de fuentes renovables consumida por la organización (MWh)
Electricidad	811281	376391	0	0
Calor	0	0	0	0
Vapor	0	0	0	0
Refrigeración	0	0	0	0

## C-CE8.2d

(C-CE8.2d) Proporcione detalles sobre la electricidad y el calor que su empresa ha generado y consumido para las actividades de producción de cemento.

	Generación bruta total (MWh) dentro del límite del sector de cemento	Generación consumida (MWh) dentro del límite del sector de cemento
Electricidad	811281	376391
Calor	0	0
Vapor	0	0

## C9. Métricas adicionales

**(C9.1) Indique cualquier otra métrica relacionada con el clima que sea relevante para su empresa.****Descripción**

Otro. Especifique. (Total CO2 emissions - gross (tonne))

**Valor de la métrica**

8186930

**Numerador de la métrica**

8186930 tonne of CO2 (gross)

**Denominador de la métrica (únicamente la métrica de intensidad)**

NA

**% de cambio desde el año anterior**

5.52

**Dirección del cambio**

Aumentó

**Explicación**

This indicator is calculated according to the methodology determined by Cement Sustainability Initiative (CSI) of the World Business Council for Sustainable Development (WBCSD), now GCCA (Global Cement and Concrete Association): "The Cement CO2 and Energy Protocol - CO2 and Energy Accounting and Reporting Standard for the Cement Industry" (WBCSD-CSI, 2011). This indicator, that corresponds to the variable 59c calculated by the methodology described, is defined as follows: "Total direct emissions from raw materials, kiln fuels and non-kiln fuels; excluding CO2 from on-site power generation". In 2019, regarding 2018, there was a proportional increase (which was 5.52%) of this indicator with the increase of the clinker production in the same period. Coverage: Cement operations of the Colombia, Caribbean and Central America and United States regions.

**Descripción**

Otro. Especifique. (Total CO2 emissions - net (tonne))

**Valor de la métrica**

8057886

**Numerador de la métrica**

8057886 tonne of CO2 (net)

**Denominador de la métrica (únicamente la métrica de intensidad)**

NA

**% de cambio desde el año anterior**

5.67

**Dirección del cambio**

Aumentó

**Explicación**

This indicator is calculated according to the methodology "The Cement CO2 and Energy Protocol - CO2 and Energy Accounting and Reporting Standard for the Cement Industry" (WBCSD-CSI, 2011). This indicator, that corresponds to the variable 71 calculated by the methodology described, is defined as follows: "Total direct emissions from raw materials, kiln fuels and non-kiln fuels, excluding CO2 from on-site power generation, minus alternative fossil fuels". In 2019, regarding 2018, there was a proportional increase (which was 5.67%) of this indicator with the increase of the clinker production in the same period. Coverage: Cement operations of the Colombia, Caribbean and Central America and United States regions.

**Descripción**

Otro. Especifique. (Specific heat consumption of clinker pro)

**Valor de la métrica**

3759

**Numerador de la métrica****Denominador de la métrica (únicamente la métrica de intensidad)****% de cambio desde el año anterior**

0.79

**Dirección del cambio**

Aumentó

**Explicación**

This indicator is calculated according to the methodology "The Cement CO2 and Energy Protocol - CO2 and Energy Accounting and Reporting Standard for the Cement Industry" (WBCSD-CSI, 2011). This indicator, that corresponds to the variable 93 calculated by the methodology described, is defined as follows: "Specific heat consumption of clinker production: Total heat consumption of kilns divided by the clinker production". In 2019, compared to 2018, specific heat consumption remained almost at the same value (the increase was only 0.79%). This was because the company in 2019 continued developing the BEST program (Building Efficiency and Sustainability for Tomorrow), which has allowed to achieve savings in energy consumption. In 2019 Argos promoted thermal efficiency in production processes by defining and monitoring ten key rules that permitted energy resources optimization and that will enable to achieve world-class performance. Coverage: Cement operations of the Colombia, Caribbean and Central America and United States regions.

**Descripción**

Otro. Especifique. (Alternative and Biomass fuel rate (%))

**Valor de la métrica**

5.55

**Numerador de la métrica**

35762 TJ per year

**Denominador de la métrica (únicamente la métrica de intensidad)**

1986 TJ

**% de cambio desde el año anterior**

0.44

**Dirección del cambio**

Aumentó

**Explicación**

This indicator is calculated according to the methodology "The Cement CO2 and Energy Protocol - CO2 and Energy Accounting and Reporting Standard for the Cement Industry" (WBCSD-CSI, 2011). This indicator corresponds to the sum of Alternative fuel rate (that corresponds to variable 95 of methodology mentioned) plus Biomass fuel rate (that corresponds to variable 96). "Alternative fuel rate" indicator is defined by the methodology described, as follows: "Consumption of alternative fossil fuels divided by the total heat consumption of kilns". Likewise, "Biomass fuel rate" indicator is defined by the methodology described, as follows: "Consumption of biomass fuels divided by the total heat consumption of kilns". In 2019, compared to 2018, Alternative and Biomass fuel rate increased slightly at company level due to difficulties to access to supply sources of waste and by-products. However Argos is making progress in strengthening the alternative fuel supply chain in the three regional operations: - In Colombia, the company signed an agreement with the company Duramos to supply and dispose of 100% of the tires of large mining companies, and with the organization Extractor Marialabaja for the sourcing of more than 20,000 tonne/year of agro-industrial waste to be co-processed at the Cartagena Plant. - In Honduras, Argos signed an agreement with the Dinant Corporation to do the co-processing of industrial waste generated in some of its production processes, whose characteristics prevent it from being recycled. - In the US, Argos finished commissioning of a new alternative fuel reception and supply plant in Newberry. Coverage: Cement operations of the Colombia, Caribbean and Central America and United States regions

**Descripción**

Otro. Especifique. (Clinker / cement ratio (%) )

**Valor de la métrica**

76.81

**Numerador de la métrica**

**Denominador de la métrica (únicamente la métrica de intensidad)**

**% de cambio desde el año anterior**

0.42

**Dirección del cambio**

Aumentó

**Explicación**

This indicator is calculated according to the methodology "The Cement CO2 and Energy Protocol - CO2 and Energy Accounting and Reporting Standard for the Cement Industry" (WBCSD-CSI, 2011). This indicator, that corresponds to the variable 92a calculated by the methodology described, is defined as follows: "Clinker/cement (eq.) factor: Calculated based on total clinker consumed and total Portland + Blended cements". In 2019, compared to 2018, Clinker/cement (eq.) factor remained almost at the same value (the increase was only 0.42 percentage points). In the markets of the three regionals (Colombia, Caribbean and Central America, and USA) there has been for some years an increase in demand for the cement and concrete portfolio for infrastructure (with highest content of clinker), which has influenced for that the company's cement clinker factor remain at values above 75%. However, Argos is modifying the traditional cement production process and through using thermally activated clays as raw material, is decreasing the consumption of clinker in cement production. It was like this in 2020 Green Cement was launched, which is a more environmentally friendly product. This new product has high content of supplementary cementitious materials replacing clinker in product, thereby it reduces carbon dioxide emissions by 38 percent and energy consumption by 30 percent, while maintaining the technical performance of the product. Coverage of indicator: Cement operations of the Colombia, Caribbean and Central America and United States regions.

C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

**(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) ¿Su organización invierte en investigación y desarrollo de productos o servicios de bajo nivel de carbono en relación con las actividades de su sector?**

	Inversión en investigación y desarrollo a fin de obtener bajos niveles de carbono	Comentario
Fila 1	Sí	Argos works to create sustainable value, effectively responding to new market dynamics and positioning itself as industry leader through innovation. Thus, product portfolio and customized solutions is the value proposition that Argos offers to its customers, which differentiates it in the marketplace through its product portfolio, i.e. cement, concrete, aggregates, as well as differential services such as technical assistance, integrated logistics, and customized solution design. In addition, under the "Sustainable construction" pillar of the Environmental Strategy, Company leverage life cycle management and develop products focused on solving constructive challenges with extraordinary solutions through innovation. Argos R&D team develops projects to reduce CO2 emissions at various points in the value chain. Initiatives range from identifying new raw materials to launching new products. Teamwork across a variety of company areas is essential for scaling the laboratory's developments. The research lines or programs of the R&D team for the development of low-carbon products and solutions are: - Alternative raw materials for cement production - Clinker reactivity - Supplementary cementitious materials for the production of cement - Alternative cements - Innovations in concrete production As a result of Argos commitment with sustainability through innovation, new Green Cement was launched in 2020, which is a more environmentally friendly product. This new product has high content of supplementary cementitious materials replacing clinker in product, thereby it reduces carbon dioxide emissions by 38 percent and energy consumption by 30 percent, while maintaining the technical performance of the product. Argos invested in Green Cement Project around USD 78 million. Other highlights results in 2019 are: - Argos dedicated in 2019 60% of its total R&D budget for researching and developing of these products. - The Company obtained two new patents that recognize its commitment to innovation as a factor of service, differentiation and competitiveness. One is related to sulfoaluminate cements in the USA region, its first patent in this country, and the other is for cement with high addition contents in the Colombia region. - The revenues obtained from the sale of low carbon products represented 18.15% of the total revenues of Company

C-CE9.6a

**(C-CE9.6a) Proporcione detalles acerca de las inversiones de su organización con bajo nivel de carbono para las actividades de producción de cemento durante los últimos tres años.**

Área de tecnología	Etapa de desarrollo en el año de informe	% promedio de la inversión total en investigación y desarrollo durante los últimos 3 años	Cifra de la inversión en investigación y desarrollo en el año de informe (opcional)	Comentario
Cambio de combustibles	Implementación comercial de pequeña escala	≤ 20%	81644867	Argos considers innovation as the foundation for business sustainability and the main medium through which company maintain its competitive advantage. For that reason, the company invests in research and development (R&D) of low-carbon products and services related to its cement sector as method to mitigate climate transitions risks. One of the innovation initiatives in which Argos invests to achieve low carbon products is the use of alternative fuels in its cement plants. The company has the target to substitute 18% of conventional fossil fuel heat consumption with alternative fuels by 2025. In 2019 Argos achieved a 5.6% rate of use in alternative fuels in replacement of conventional fuels with the use of more than 86000 tonne of waste. The figure investment presented corresponds to the implementation of the alternative fuels projects in Colombia Region, specifically at Cartagena Plant, which achieved system stabilization and as a result, a heat consumption substitution of 1.2%, which represented the use of more than 5,000 tons of waste.
Cemento con bajo nivel de clínker	Implementación comercial de gran escala	81 - 100%	85387716207	Argos considers innovation as the foundation for business sustainability and the main medium through which company maintain its competitive advantage. For that reason, the company invests in research and development (R&D) of low-carbon products and services related to its cement sector as method to mitigate climate transitions risks. Therefore, one of the components of the innovation strategy aimed at this goal is the expansion of the portfolio of products and services with sustainability characteristics, like the low carbon products due to its lower content of clinker. In 2019 Argos completed the commissioning to install the clay thermal activation line at the Rioclaro Plant, which can produce up to 450,000 tonne/year. With this line, in 2020 Argos will begin manufacture and distribute Green Cement, which decreases the use of the traditional clinker and therefore decreases CO2 emissions up to 38% and of energy consumption up to 30%, compared to the manufacturing process of the average general-purpose cement. The company has invested more than USD \$ 78 million in the last three years in this Green Cement project. The figure investment presented corresponds to the implementation of calcined clays project located at Rioclaro cement Plant, and other projects developed by R&D team during 2019 under its program of Supplementary cementitious materials for cement production.
Cementos/aglutinantes alternativos con bajo nivel de CO2	Investigación y desarrollo aplicada	≤ 20%	70899810	The company invests in research and development (R&D) of low-carbon products and services related to its cement sector as method to mitigate climate transitions risks. Other of components of the innovation strategy is the expansion of the portfolio of products and services with sustainability characteristics, like the alternative low CO2 cements. The figure presented corresponds to investments in projects developed by R&D team during 2019 for hybrid cements development. This technology allows the reduction of clinker in cement and increases the use of by-products such as fly ash, slags and raw materials such as natural pozzolans.
Captura, utilización y almacenamiento de carbono (CUAC)	Demostración piloto	≤ 20%	548278860	Regarding CCUS technologies investments, Argos continued during 2019 working with the support the Medellín Business and Innovation Center (RutaN) and the team from the Chilean company Clean Energy, Eafit University and the University of Antioquia, in developing a technology for the capturing of CO2 with microalgae. To date, Argos has achieved significant advances in the development of this technology. With the assembly at the Cartagena Plant, the company was able to increase the capture efficiency by 1.2%, achieving biomass conversion efficiency of 63% and 70% conversion efficiency of biocrude into biofuel, 10% above the target set. Additionally, it has been possible to convert biomass into biocrude with similar characteristics to conventional oil, allowing Argos to produce a biodiesel suitable for engine operation. The figure presented corresponds to investment in project of CO2 capture with Microalgae developed by R&D team during 2019.
Otro. Especifique. (Cement and Concrete Solutions)	Investigación y desarrollo aplicada	≤ 20%	216735389	R&D team develops projects to reduce CO2 emissions at various points in the value chain. Initiatives range from identifying new raw materials to launching new products. Teamwork across a variety of company areas is essential for scaling the laboratory's developments. Other programs developed by this team regarding low carbon products and solutions are: Innovations in concrete production: design optimization, use of supplementary cementitious materials. Increase in clinker reactivity: development of a more reactive clinker that allows to increase the levels of addition. Use of alternative raw materials for clinker and cement production. The figure presented corresponds to investments in projects developed by R&D team during 2019 for Cement and Concrete Solutions development.

**C10. Verificación**

**C10.1**

**(C10.1) Indique el estado de verificación/garantía que se aplica a las emisiones reportadas**

	Estado de verificación/garantía
Alcance 1	Proceso de verificación o garantía de terceros implementado
Alcance 2 (basadas en la localización o en el mercado)	Proceso de verificación o garantía de terceros implementado
Alcance 3	Proceso de verificación o garantía de terceros implementado

**C10.1a**

**(C10.1a) Proporcione más detalles de la verificación/garantía adoptada para sus emisiones de alcance 1, y adjunte las declaraciones pertinentes.**

**Ciclo de verificación o garantía implementado**

Proceso anual

**Estado en el año del informe actual**

Completo

**Tipo de verificación o garantía**

Garantía limitada

**Adjunte la declaración**

Independent Review Report\_Deloitte.pdf

**Referencia de página/sección**

Page 2. Material Issues – Climate Change (305-1 Direct (Scope 1) GHG emissions)

**Estándar relevante**

ASAE3000

**Proporción de emisiones informadas verificadas (%)**

100

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**C10.1b**

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**(C10.1b) Proporcione más detalles de la verificación/garantía adoptada para sus emisiones de alcance 2, y adjunte las declaraciones pertinentes.**

**Enfoque del alcance 2**

Alcance 2 basada en la localización

**Ciclo de verificación o garantía implementado**

Proceso anual

**Estado en el año del informe actual**

Completo

**Tipo de verificación o garantía**

Garantía limitada

**Adjunte la declaración**

Independent Review Report\_Deloitte.pdf

**Referencia de página/sección**

Page 2. Material Issues – Climate Change 305-2 Energy indirect (Scope 2) GHG emissions).

**Estándar relevante**

ASAE3000

**Proporción de emisiones informadas verificadas (%)**

100

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**C10.1c**

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**(C10.1c) Proporcione más detalles de la verificación/garantía adoptada para sus emisiones de alcance 3, y adjunte las declaraciones pertinentes.**

**Categoría de alcance 3**

Alcance 3: Bienes o servicios comprados

**Ciclo de verificación o garantía implementado**

Proceso anual

**Estado en el año del informe actual**

Completo

**Tipo de verificación o garantía**

Garantía limitada

**Adjunte la declaración**

Independent Review Report\_Deloitte.pdf

**Referencia de página/sección**

Page 2. Material Issues – Climate Change (305-3 Other indirect (Scope 3) GHG emissions).

**Estándar relevante**

ASAE3000

**Proporción de emisiones informadas verificadas (%)**

100

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**Categoría de alcance 3**

Alcance 3: Actividades relacionadas con el combustible y la energía (no incluidas en los alcances 1 o 2)

**Ciclo de verificación o garantía implementado**

Proceso anual

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**Estado en el año del informe actual**

Completo

**Tipo de verificación o garantía**

Garantía limitada

**Adjunte la declaración**

Independent Review Report\_Deloitte.pdf

**Referencia de página/sección**

Page 2. Material Issues – Climate Change (305-3 Other indirect (Scope 3) GHG emissions).

**Estándar relevante**

ASAE3000

**Proporción de emisiones informadas verificadas (%)**

100

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**Categoría de alcance 3**

Alcance 3: Transporte y distribución upstream

**Ciclo de verificación o garantía implementado**

Proceso anual

**Estado en el año del informe actual**

Completo

**Tipo de verificación o garantía**

Garantía limitada

**Adjunte la declaración**

Independent Review Report\_Deloitte.pdf

**Referencia de página/sección**

Page 2. Material Issues – Climate Change (305-3 Other indirect (Scope 3) GHG emissions).

**Estándar relevante**

ASAE3000

**Proporción de emisiones informadas verificadas (%)**

100

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**Categoría de alcance 3**

Alcance 3: Viajes de negocios

**Ciclo de verificación o garantía implementado**

Proceso anual

**Estado en el año del informe actual**

Completo

**Tipo de verificación o garantía**

Garantía limitada

**Adjunte la declaración**

Independent Review Report\_Deloitte.pdf

**Referencia de página/sección**

Page 2. Material Issues – Climate Change (305-3 Other indirect (Scope 3) GHG emissions).

**Estándar relevante**

ASAE3000

**Proporción de emisiones informadas verificadas (%)**

100

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**Categoría de alcance 3**

Alcance 3: Transporte y distribución downstream

**Ciclo de verificación o garantía implementado**

Proceso anual

**Estado en el año del informe actual**

Completo

**Tipo de verificación o garantía**

Garantía limitada

**Adjunte la declaración**

Independent Review Report\_Deloitte.pdf

**Referencia de página/sección**

Page 2. Material Issues – Climate Change (305-3 Other indirect (Scope 3) GHG emissions).

**Estándar relevante**

ASAE3000

**Proporción de emisiones informadas verificadas (%)**

100

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C10.2

(C10.2) ¿Verifica la información relacionada con el clima informada en su divulgación a CDP que no sean las cifras de emisiones reportadas en los puntos C6.1, C6.3 y C6.5?

Sí

C10.2a

(C10.2a) ¿Qué puntos de entrada de datos en su divulgación de CDP se han verificado y qué estándares de verificación se utilizaron?

La verificación del módulo de divulgación se relaciona con	Datos verificados	Estándar de verificación	Explicación
C2. Riesgos y Oportunidades	Otro. Especifique. (Financial implications & other risks & opportunities due to climate change (GRI 201-2))	- Verification standard: ISAE3000. - Type of verification: limited assurance. - Page reference: Page 2 (Material Issues): Climate Change (GRI 201-2 Financial implications & other risks & opportunities due to climate change).	Every year, an independent third party carries out an audit of the indicators that are part of Argos' Integrated Report. This audit is conducted in accordance to the International Standard ISAE 3000 - Assurance Engagements Other than Audits or Reviews of Historical Financial Information, and the scope is a review of the adaptation of the contents of the Integrated Report to the Guide for the Preparation of Sustainability Reports of the Global Reporting Initiative (GRI Standards). Likewise, Deloitte, as part of the verification process of the environmental indicators, conducts interviews with Argos' operations to ensure the accuracy of the climate change data, based on the WBCSD's CO2 and Energy Accounting and Reporting Standard for the Cement Industry: The Cement CO2 and Energy Protocol (WBCSD-CSI, 2011). Among the climate change indicators verified by Deloitte in 2019 is: Financial implications & other risks & opportunities due to climate change (GRI 201-2).
C4. Metas y desempeño	Progreso con respecto a la meta de reducción de emisiones	- Verification standard: ISAE3000. - Type of verification: limited assurance. - Page reference: Page 2 (Material Issues): Climate Change A-EC1 CO2 net specific emissions	Every year, an independent third party carries out an audit of the indicators that are part of Argos' Integrated Report. This audit is conducted in accordance to the International Standard ISAE 3000 - Assurance Engagements Other than Audits or Reviews of Historical Financial Information, and the scope is a review of the adaptation of the contents of the Integrated Report to the Guide for the Preparation of Sustainability Reports of the Global Reporting Initiative (GRI Standards). Likewise, Deloitte, as part of the verification process of the environmental indicators, conducts interviews with Argos' operations to ensure the accuracy of the climate change data, based on the WBCSD's CO2 and Energy Accounting and Reporting Standard for the Cement Industry: The Cement CO2 and Energy Protocol (WBCSD-CSI, 2011). Among the climate change indicators verified by Deloitte in 2019 is: CO2 net specific emissions (A-EC1), which corresponds to the indicator to which Argos has assigned a reduction CO2 target to year 2025.
C4. Metas y desempeño	Actividades de reducción de emisiones	- Verification standard: ISAE3000. - Type of verification: limited assurance. - Page reference: Page 2 (Material Issues): Climate Change (GRI 305-5 Reduction of GHG emissions	Every year, an independent third party carries out an audit of the indicators that are part of Argos' Integrated Report. This audit is conducted in accordance to the International Standard ISAE 3000 - Assurance Engagements Other than Audits or Reviews of Historical Financial Information, and the scope is a review of the adaptation of the contents of the Integrated Report to the Guide for the Preparation of Sustainability Reports of the Global Reporting Initiative (GRI Standards). Likewise, Deloitte, as part of the verification process of the environmental indicators, conducts interviews with Argos' operations to ensure the accuracy of the climate change data, based on the WBCSD's CO2 and Energy Accounting and Reporting Standard for the Cement Industry: The Cement CO2 and Energy Protocol (WBCSD-CSI, 2011). Among the climate change indicators verified by Deloitte in 2019 is: Reduction of GHG emissions (GRI 305-5).
C6. Datos sobre las emisiones	Otro. Especifique. (Year on year change in emissions (Scope 1, Scope 2, Scope 3) and intensity figures)	- Verification standard: ISAE3000. - Type of verification: limited assurance. - Page reference: Page 2. Material Issues – Climate Change: 305-1 Direct (Scope 1) GHG emissions 305-2 Energy indirect (Scope 2) GHG emissions 305-3 Other indirect (Scope 3) GHG emissions 305-4 GHG emissions intensity A-EC1 CO2 net specific emissions.	Every year, an independent third party carries out an audit of the indicators that are part of Argos' Integrated Report. This audit is conducted in accordance to the International Standard ISAE 3000 - Assurance Engagements Other than Audits or Reviews of Historical Financial Information, and the scope is a review of the adaptation of the contents of the Integrated Report to the Guide for the Preparation of Sustainability Reports of the Global Reporting Initiative (GRI Standards). Likewise, Deloitte, as part of the verification process of the environmental indicators, conducts interviews with Argos' operations to ensure the accuracy of the climate change data, based on the WBCSD's CO2 and Energy Accounting and Reporting Standard for the Cement Industry: The Cement CO2 and Energy Protocol (WBCSD-CSI, 2011). Among the climate change indicators verified by Deloitte in 2019 are: - Direct (Scope 1) GHG emissions (GRI 305-1) - Energy indirect (Scope 2) GHG emissions (GRI 305-2) - Other indirect (Scope 3) GHG emissions (GRI 305-3) - GHG emissions intensity (GRI 305-4) - CO2 net specific emissions (A-EC1)
C7. Desglose de emisiones	Otro. Especifique. (Year on year change in emissions (Scope 1, Scope 2), and intensity figures)	- Verification standard: ISAE3000. - Type of verification: limited assurance. - Page reference: Page 2. Material Issues – Climate Change: 305-1 Direct (Scope 1) GHG emissions 305-2 Energy indirect (Scope 2) GHG emissions 305-4 GHG emissions intensity A-EC1 CO2 net specific emissions.	Every year, an independent third party carries out an audit of the indicators that are part of Argos' Integrated Report. This audit is conducted in accordance to the International Standard ISAE 3000 - Assurance Engagements Other than Audits or Reviews of Historical Financial Information, and the scope is a review of the adaptation of the contents of the Integrated Report to the Guide for the Preparation of Sustainability Reports of the Global Reporting Initiative (GRI Standards). Likewise, Deloitte, as part of the verification process of the environmental indicators, conducts interviews with Argos' operations to ensure the accuracy of the climate change data, based on the WBCSD's CO2 and Energy Accounting and Reporting Standard for the Cement Industry: The Cement CO2 and Energy Protocol (WBCSD-CSI, 2011). Among the climate change indicators verified by Deloitte in 2019 are: - Direct (Scope 1) GHG emissions (GRI 305-1) - Energy indirect (Scope 2) GHG emissions (GRI 305-2) - GHG emissions intensity (GRI 305-4) - CO2 net specific emissions (A-EC1)
C8. Energía	Otro. Especifique. (Energy Management Model: - 302-1 Energy consumption within the organization. - 302-4 Reduction of energy consumption)	- Verification standard: ISAE3000. - Type of verification: limited assurance. - Page reference: Page 2. Material Issues: Efficiency and productivity (GRI 302-1 Energy consumption within the organization; GRI 302-4 Reduction of energy consumption)	Every year, an independent third party carries out an audit of the indicators that are part of Argos' Integrated Report. This audit is conducted in accordance to the International Standard ISAE 3000 - Assurance Engagements Other than Audits or Reviews of Historical Financial Information, and the scope is a review of the adaptation of the contents of the Integrated Report to the Guide for the Preparation of Sustainability Reports of the Global Reporting Initiative (GRI Standards). Likewise, Deloitte, as part of the verification process of the environmental indicators, conducts interviews with Argos' operations to ensure the accuracy of the climate change data, based on the WBCSD's CO2 and Energy Accounting and Reporting Standard for the Cement Industry: The Cement CO2 and Energy Protocol (WBCSD-CSI, 2011). Among the climate change indicators verified by Deloitte in 2019 are: - GRI 302-1 Energy consumption within the organization - GRI 302-4 Reduction of energy consumption
C9. Métricas adicionales	Otro. Especifique. (GCCA Indicators (Climate Change): CO2 emissions gross and net, Specific CO2 emissions gross and net, Use of alternative fuels, Specific energy consumption, Use of biomass fuel, Clinker/Cement Ratio)	- Verification standard: ISAE3000. - Type of verification: limited assurance. - Page reference: Page 3 Annex 1 GCCA (CS) (Total CO2 emissions gross, Total CO2 emissions net, Specific CO2 emissions gross, Specific CO2 emissions net, Use of alternative fuels, Specific energy consumption in clinker production, Use of biomass fuel, Clinker / Cement Ratio	Every year, an independent third party carries out an audit of the indicators that are part of Argos' Integrated Report. This audit is conducted in accordance to the International Standard ISAE 3000 - Assurance Engagements Other than Audits or Reviews of Historical Financial Information, and the scope is a review of the adaptation of the contents of the Integrated Report to the Guide for the Preparation of Sustainability Reports of the Global Reporting Initiative (GRI Standards). Likewise, Deloitte, as part of the verification process of the environmental indicators, conducts interviews with Argos' operations to ensure the accuracy of the climate change data, based on the WBCSD's CO2 and Energy Accounting and Reporting Standard for the Cement Industry: The Cement CO2 and Energy Protocol (WBCSD-CSI, 2011). Among the climate change indicators verified by Deloitte in 2019 are: - Total CO2 emissions gross - Total CO2 emissions net - Specific CO2 emissions gross - Specific CO2 emissions net - Use of alternative fuels - Specific energy consumption in clinker production - Use of biomass fuel - Clinker / Cement Ratio

La verificación del módulo de divulgación se relaciona con	Datos verificados	Estándar de verificación	Explicación
C6. Datos sobre las emisiones	Verificación de la huella del producto	- Verification standard: Product Category Rules (PCR) for ISO 14025 Type III Environmental Product Declarations (EPDs) for Concrete meeting the requirements of one of the following: ASTM C94, ASTM C90, CSA A23.1/A23.2, UNSPSC code 30111500, Version 1.1 dated December 4, 2013, The Carbon Leadership Forum <a href="http://www.carbonleadershipforum.org">www.carbonleadershipforum.org</a> - Type of verification: External Verification. Climate Earth, Inc. 415- 391-2725 <a href="http://www.climateearth.com">www.climateearth.com</a>	Argos published 4 EPD for 347 products in 2014 under Pré and BASF advisory. All EPD were third party verified by Athena Sustainable Materials Institute and NSF. These EPDs covered two products in Miraflores plant in Panama, 19 products of 18 plants in USA South Central region, and 3 Argos' green mixes in USA. EPD USA Prime green 4070.pdf EPD Texas.pdf EPD USA Prime green 4072.pdf EPD USA Prime green 4102.pdf EPD Panama.pdf

## C11. Precio del carbono

### C11.1

**(C11.1) ¿Algunas de sus operaciones o actividades están reguladas por un sistema de fijación de precio del carbono (es decir, ETS, Límite y comercio o Impuesto al carbono)?**

Sí

### C11.1a

**(C11.1a) Seleccione las normas de fijación de precio del carbono que afectan sus operaciones.**

Impuesto al carbono de Colombia

### C11.1c

**(C11.1c) Complete la siguiente tabla para cada sistema impositivo que regule a su organización.**

#### Impuesto al carbono de Colombia

##### Fecha de inicio del período

enero 1 2019

##### Fecha de finalización del período

diciembre 31 2019

##### % de las emisiones de alcance 1 cubierto por el impuesto

1.35

##### Costo total de los impuestos pagados

862242109

##### Comentario

The carbon tax in Colombia was created through Law 1819 of 2016 (Structural Tax Reform). It is a tax over the carbon content of all fossil fuels, including all petroleum derivatives and all types of fossil gas that are used for combustion. The fuels that are taxed by this tax are: Gasoline, Kerosene, Jet Fuel, Diesel and Fuel Oil. Natural gas is also taxed but only for use in the hydrocarbon refining and petrochemical industry, and liquefied petroleum gas (LPG) only for sale to industrial users. The National Carbon Tax is paid in Colombia since January 1, 2017. All users of taxed fuels pay the tax to their fuel supplier on the product invoice, according to the commercial agreements established in the fuel distribution chain. In the case of Argos, carbon tax has been paid on the consumption of the following fuels: Diesel, Gasoline and Fuel oil. In June 2017, Decree 926 of 2017 was issued in which consumers of fuels subject to the carbon tax are allowed to certify that they are "carbon neutral" in the CO2 emissions generated by the consumption of those fuels. For this certification, the purchase of carbon credits in the national market is allowed. In 2019, under the framework of this law, Argos compensated 13320 tonne of CO2 generated by the diesel combustion in its cement and concrete operations in Colombia, through the acquisition of emission reduction certificates from conservation and reforestation projects.

### C11.1d

**(C11.1d) ¿Cuál es su estrategia para cumplir con los sistemas que lo regulan o que planea que lo regulen?**

During last years Argos has carried out a risk identification from a strategic level on processes, projects, and in all its operations, as well as to corporate governance, sustainability and the continuity of operations. As a result, Argos has identified 11 strategic risks with a potential impact on the Company's strategic objectives. According to the classification of inherent risks to climate change made by Argos, it has been possible to recognize CO2 market schemes as likely be implemented over the next few years in the locations where Argos operates, more specifically, USA and Colombia regions, which represent most of the company's cement operations. Therefore these regions have been identified as the main exposed regions to this risk.

The company monitors strategic risks through the definition of risk scenarios and their quantification via impacts of a potential risk materialization on strategic KPIs and KRIs such as EBITDA, FCF, net debt/EBITDA ratio and ROCE, measured as deviations of risk materializations from budgeted KPIs or targets. For the Strategic Risk 5, namely "new policies or changes in regulation that affect business performance", risk scenarios were estimated addressing potential carbon pricing schemes in specific countries. These scenarios are constantly reported to the top management to promote decision-making.

Monitoring and mitigation of this risk are integrated into the company's risk management system. Likewise, within the framework of the Environmental Strategy and the Energy Policy, Argos monitors and implements actions to reduce CO2 emissions, such as: CO2 inventory (scope 1, scope 2 and scope 3), CO2 reduction objectives, energy efficiency, use of alternative fuels and reduction of the clinker/cement ratio, as well as the increase in the efficiency of the value chain, among others. As part of the BEST program (Building Efficiency and Sustainability for Tomorrow) Argos considers that operational efficiency mitigates climate-related impacts through the implementation of better and cleaner technologies and co-processing programs. The company constantly monitors risks regarding strategic efficiency projects and new technologies such as the usage of calcined clay.

In 2019, Argos continued implementing initiatives related to the company's climate change strategy, specifically with action lines that promote the mitigation of CO2 emissions. These actions involved investments of approximately USD \$ 26.3 million (86221 million COP).

Some of these initiatives were:

- Commissioning of the artificial pozzolana production line (thermal activation of clays) and the new milling operation and blending stations at the Rio Claro Plant. The new formulation of Cement General Use with the addition of artificial pozzolan and limestone decreases specific CO2 emissions by 38% and thermal energy consumption by 30% per tonne of product, fulfilling performance and improving its durability conditions.
- Increased substitution of conventional fuels (coal and petcoke) with alternative fuels (tires, mixed industrial waste, RDF, used oils, biomass, etc.), achieving a 5.6% rate at company level.
- Research and Development team (R&D) continued developing innovative and low carbon processes, products and solutions that allow reduce CO2 emissions at various stages of value chain.
- It was achieved significant progress in the development of CO2 capture and transformation technology with microalgae, through the assembly at the Cartagena Plant. The company increased the efficiency in capture by 1.2%, reached an efficiency of conversion of biomass into biocrudo of 63% and a conversion efficiency of biofuel of 70%.
- Enhancements in operation and stability of kilns in various cement plants of Colombia Region, which has lead to obtain savings in thermal energy.
- Company continued using Fluorite as a mineralizing agent for clinker, obtaining better rates of specific heat consumption in clinker production.
- Continued using alternative raw materials in cement and concrete operations.
- Energy Star certification for the Harleyville, Newberry and Roberta plants in the USA region.

**C11.2**

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**(C11.2) ¿Su organización ha originado o comprado algún crédito de carbono basado en proyectos en el periodo de reporte de información?**

Sí

**C11.2a**

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**(C11.2a) Proporcione detalles de los créditos de carbono basados en proyectos que su organización originó o compró durante el periodo de presentación de informes.**

**Origen o compra del crédito**

Compra del crédito

**Tipo de proyecto**

Bosques

**Identificación de proyecto**

"Manejo sostenible de los bosques aplicado en el oriente antioqueño bajo el esquema BanCO2" (Sustainable management of forests applied in eastern Antioquia under the BanCO2 scheme).

**Verificado según qué estándar**

VCS (Estándar de carbono verificado)

**Cantidad de créditos (toneladas métricas de CO2e)**

13320

**Cantidad de créditos (toneladas métricas de CO2e): Volumen ajustado por riesgo**

**Créditos cancelados**

Sí

**Propósito, por ej. cumplimiento**

Cumplimiento

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## C11.3

**(C11.3) ¿Su organización utiliza un precio interno del carbono?**

Sí

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## C11.3a

**(C11.3a) Proporcione detalles sobre el modo en que su empresa utiliza un precio interno para el carbono.**

**Objetivo para la implementación de un precio interno del carbono**

Navegar las normas sobre GEI

Modificar el comportamiento interno

Someter las inversiones a pruebas de esfuerzo

Identificar y aprovechar las oportunidades con bajo nivel de carbono

**Alcance de GEI**

Alcance 1

Alcance 2

**Aplicación**

Company-wide (with local variations accepted)

**Precios reales utilizados (Moneda/toneladas métricas)**

16416

**Variación de los precios utilizados**

Argos established a uniform price: a single price that is applied throughout the company independent of geography, business unit, or type of decision. The price of USD 5 / metric tonne of CO2 established by Argos as internal carbon price, applies to all geographies where Argos has presence (Colombia, Caribbean and Central America and USA).

**Tipo de precio interno del carbono**

Precio sombra

**Impacto y repercusión**

Argos has developed the use of an internal carbon price in order to get prepared to the upcoming GHG regulations in the geographies where the company is present. For doing so, an interdisciplinary team was formed within the company and the best price was defined for current situation of the company after analyzing different options including: benchmarking against peers, social price of carbon, and technical analysis. Price value has been determined as it is the level of risk identified by the company in the geographies where its operations are located. For determining it, Argos considered as a main reference the carbon tax nowadays being applied in Colombia for liquid fuels usage, as it is in Colombia where most CO2 direct emissions are produced. The process for applying it within the company is the following: - It starts by identifying within the results for the CAPEX allocation system of the company those new projects in line with adding profitability to the company. - Later, it is calculated the contribution of those new projects to increase or reduce CO2 absolute emissions, which will represent the cost that the company would assume. - Level of risk is identified for the company, making projections for different years. Also, the hypothetical scenarios are analyzed for the geographies where the company is located. - Cost or savings of the final net value to society is calculated. - Financial impact of each project under the assumption of a possible CO2 tax is calculated and finally a sensitivity analysis is conducted to determine to which level of extent any KPI's, such as the Internal Rate of Return (IRR), is affected by the internal carbon price applied. In order to determine the impact of the application of this internal carbon price process within the company, Argos has tested it in several projects. Argos will have the process in place to fully implement the analysis needed within the company and take those decisions needed in order to be prepared to the GHG regulations upcoming in the geographies where the company is located.

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## C12. Compromiso

## C12.1

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### (C12.1) ¿Interactúa con su cadena de valor en asuntos relacionados con el clima?

- Sí, nuestros proveedores
- Sí, nuestros clientes
- Sí, otros socios de la cadena de valor

## C12.1a

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### (C12.1a) Proporcione detalles sobre su estrategia de compromiso de los proveedores con respecto al clima.

#### Tipo de vinculación

Cumplimiento e incorporación

#### Detalles de la vinculación

Código de conducta que incluya los KPI de cambio climático  
El cambio climático está integrado en los procesos de evaluación de proveedores

#### % de proveedores por número

60

#### % del gasto total de adquisición (directo e indirecto)

60

#### % de emisiones del alcance 3 relacionadas con los proveedores como se informó en la pregunta C6.5

56.11

#### Fundamento de la cobertura de su vinculación

Argos promotes environmental sustainability from the inside to the stakeholders. In this manner, we improve our environmental performance supported by a management system for the prevention, mitigation, correction and compensation of our environmental impacts, with an emphasis on climate change, water and biodiversity, emissions, sustainable construction and circular economy. Argos has adopted the Code of Conduct for Suppliers, which contains the responsible business practices and values that Argos expects all its suppliers to adopt in contractual negotiations and relationships. We are aware of the importance of identifying, valuing and mitigating our risk exposure, hence we continue to apply the whole vendor management cycle through these processes: identification, pre-selection, negotiation, performance appraisal and recognition.

#### Impacto del compromiso, incluso medidas del éxito

Argos' Supplier Code of Conduct, the Procurement Policy, the Policy on Human Rights, the OHS Policy, the Sustainability Policy, and the Sustainable Development Goals (SDG) are some of the guidelines and policies that provide for controls that allow us to identify risks related to legal, environmental, economic and social matters, and mitigate them by fulfilling practices set forth by the Company, which ensure reliability and sustainability of services contracted and goods supplied. We act in an environmentally responsible manner in all our businesses and daily activities. Our influence in this area extends through the three geographical regions where we operate, through the administration and addressing of aspects related to suppliers and contractors who provide us with goods and service. That's why all of our suppliers agree to comply with our Suppliers' Code of Conduct when signing a contract with the company or accepting a purchase order. The assessment and monitoring of sustainability risk extend throughout our supplier management cycle, starting with the pre-selection stage, where certain ESG aspects established as the minimum standard for contracting with Argos are analyzed. According to the supplier category and its associated risk, third party certifications are requested, before contracting thereby guaranteeing proper management in the framework of national regulation and company policies. These certifications include revisions such as evaluation of health, safety, human rights, and environment management systems; revision of operating and distribution licenses, environmental management plans, and mining permit certificates.

#### Comentario

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#### Tipo de vinculación

Recopilación de información (comprender el comportamiento de los proveedores)

#### Detalles de la vinculación

Recopilar información de los proveedores al menos anualmente sobre cambio climático y carbono

#### % de proveedores por número

5.96

#### % del gasto total de adquisición (directo e indirecto)

16.89

#### % de emisiones del alcance 3 relacionadas con los proveedores como se informó en la pregunta C6.5

56.11

#### Fundamento de la cobertura de su vinculación

Aligned with the Argos' Sustainability Policy and seeking to evaluate performance in the three sustainability dimensions, suppliers identified as high risk are evaluated yearly through the Suppliers' Sustainability Index (SSI) which was jointly developed with the Massachusetts Institute of Technology (MIT). The index results allow us to identify the main gaps and opportunities of our suppliers, and to agree on action plans. The transport process is a priority in our company Sustainable Supply Chain Strategy, due to its importance for our business model and the high sustainability risk it represents. Therefore, we work towards ensuring its sustainability and strengthening its processes and suppliers. The long-term relations that we build with our transport contractors guarantee efficient and safe operations.

#### Impacto del compromiso, incluso medidas del éxito

During 2019, 617 suppliers were evaluated in terms of quality, service, and sustainability performance ensuring constant feedback and identifying key factors for development. Based on good sustainability practices that Argos seeks in its suppliers and with the aim of knowing the status of sustainability issues of our suppliers, in 2019 we applied the Suppliers' Sustainability Index (SSI) to 65 suppliers in the three regions; based on the results, we promote lines of action that lead to a supply chain that is socially and environmentally responsible. Transport contractors are closely developed and monitored. Therefore, information such as carbon footprint measurement, climate change strategies and purchase of bonds to offset emissions is requested both in the pre-selection stage and during our commercial relationship with them.

#### Comentario

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#### Tipo de vinculación

Compromiso e incentivación (modificar el comportamiento de los proveedores)

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#### Detalles de la vinculación

Implementar una campaña para informar a los proveedores acerca del cambio climático

#### % de proveedores por número

5.96

#### % del gasto total de adquisición (directo e indirecto)

16.89

#### % de emisiones del alcance 3 relacionadas con los proveedores como se informó en la pregunta C6.5

56.11

#### Fundamento de la cobertura de su vinculación

We implement different methods of engagement with our stakeholders and suppliers due to our continue compromise responsible practices, annually we carry out the following mechanisms: "Sustainability Dialogues", the Integrated Report, and "Sustainability week", which are spaces that promote the sustainable culture. Likewise, we build skills through collaborative business strengthening schemes with government organizations and training with internal and external experts that contribute to improve their management capacity and the industrial and social fabric of the country. The University for Suppliers continued being one of our strategies to train suppliers in sustainability practices. Additionally, we carried out the second edition of the "Growing Together" recognition event, where we awarded suppliers who demonstrated outstanding performance in: innovation, sustainability, health & safety, growing together and comprehensive practices.

#### Impacto del compromiso, incluso medidas del éxito

In 2019, 138 suppliers participated in our programs; of these, 3 in strengthening processes specialized in energy efficiency, 45 in the University for Suppliers (which includes different schools in sustainability, corporate governance, leadership and management, cement, concrete and supply chain), also 90 suppliers participated in the second edition of the "Growing Together" supplier recognition event, where 13 of them were winners. In 2019 within the framework of the "Sustainability Dialogues" with the stakeholders (which have an annual frequency), the company's climate change strategy was disclosed. In these dialogues, suppliers from the three regions participated actively.

#### Comentario

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## C12.1b

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### (C12.1b) Indique información detallada sobre su estrategia de compromiso para con sus clientes en relación con el clima.

#### Tipo de vinculación

Compartir educación/información

#### Detalles de la vinculación

Implementar una campaña de compromiso para informar a los clientes sobre su estrategia y desempeño con respecto al cambio climático

#### % de clientes por número

88

#### % de emisiones del alcance 3 relacionadas con los clientes como se informó en la pregunta C6.5

0

#### Cobertura de la cartera (total o pendiente)

<Not Applicable>

#### Explique el razonamiento para seleccionar este grupo de clientes y alcance del compromiso

Argos implements different methods of engagement with its stakeholders and particularly with customers, carrying out annually the following mechanisms: "Sustainability Dialogues", Integrated Report, and "Sustainability week", which are spaces where sustainable culture is promoted. Argos educate its customers about the company's climate change performance and strategy, the climate change impacts of using its products, goods, and/or services and for sharing information about its products and relevant certification schemes. However, Argos has a robust presence in media and uses different channels such as Youtube, Instagram, twitter, Facebook, Blog 360° en concreto, web page and conferences to runs these engagement campaigns. Also, we participate in different event and have our own events to promote in our clients our sustainability culture. Argos' USA, on the other side has beside media an education program that includes workshops and lectures for customers to offer them a better understanding of GHG emissions and climate strategies associated to our products as well as best sustainable construction practices. Argos' USA has also a campaign related to the climate change impacts of using Argos' products through its lineup of "Green mixtures", GCrete, PrimeGreen and Top Green that have a Supplementary Cementitious Materials replacement percentage of 30%-50%. And also through its slag cement and blended products. Argos slag cement has none clinker content and Argos blended products are a mixture of Portland cement and a combination of any one or more supplementary cementitious materials such as slag cement, fly ash or limestone. The program "Sacos Verdes" is based on a reverse logistics model whereby empty cement bags are cleaned and picked up back by Argos, this scheme is valuable for a joint work between the customers and suppliers to achieve a more sustainable productive chain, we are looking forward to offer this program in other countries because of its high impact and client interest. We are also working on developing new solutions that help the climate change that include packaging, products, logistics and services.

#### Impacto del compromiso, incluso medidas del éxito

Proactively managing the relationship with its customers as well as the desired experience we want to provide them, is critical for the economic sustainability of Argos. To do that, the starting point is a clear understanding of each market and the segments it comprises, creating compelling Value Propositions tailored for each. The Argos brand acts as a shared vehicle to communicate these offerings, being recognized across its footprint for some core values but conveying specific attributes that may vary by country and market segment. Argos used the Wallet Allocation Rule, which is a context-related metric, representing our share on the consumption of our clients in the category. For 2019 we defined a WAR corporate target of 56,7%, achieving 59,5% which shows a preference for our Value Proposition among our clients against the competition, and it's a better assessment of our performance on those segments where we participate. Having reached the goal we had on the WAR indicates that we have a strong customer loyalty During 2018 Argos formalized the habit of field visits, where the directors of the Design and Service areas, with the support of the Commercial area, seek to be in permanent contact with customers, capturing perceptions that allow the company to understand their needs and deliver sustainable proposals that contribute to their productivity and the success of their business. Since 2016 Argos has implemented a tool to assess and actively manage each of the main externalities associated to its operation. This tool provides important insights on the ways through which the company retains, adds, or reduces value for the society as a whole including its value chain. According to its Value Added Statement to Society (VAS), the cost derived from CO2 emissions for society in 2019 was of USD \$ 311.5 million.

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## C12.1d

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**(C12.1d) Proporcione más detalles de su estrategia de vinculación climática con otros socios de la cadena de valor.**

Argos' Sustainability Strategy establishes a framework of action since its stakeholders through the pillars of relationships of trust and shared values. Argos Sustainability Strategy favors open, direct, transparent and mutual support relationships. This enables to Company to meet the expectations of its stakeholders and leads it to reach common goals. Its relationship mechanisms and development and training programs are executed by the areas that naturally interact with each of them, thus creating relationships of trust.

Argos implements different methods of engagement with its stakeholders, carrying out annually the following mechanisms: "Sustainability Dialogues", Integrated Report, and "Sustainability week", which are spaces where sustainable culture is promoted. Relevant environmental information is shared including climate change strategy as well as GHG emissions reduction targets. Also, Argos has a Transparency line which is used constantly.

In our 3 regions, we developed a dialogue methodology that allowed us to deploy customized issues to each of the people or groups with whom we interact, this is how, in more than 50 operations we discuss about water, climate change, innovation, efficiency and profitability, and ethics and compliance with groups composed of customers, communities, suppliers and employees. We also listened to more than 2,500 people and established action plans with most of them to resolve concerns, explore opportunities and work on innovative solutions.

Argos identify & prioritize engagements with stakeholders (prioritization strategy) like other partners in the value chain, following the five criteria proposed by the AA1000SES standard:

- Dependence: those who depend on our activities, products or services or on whom we depend to continue operating.
- Responsibility: those with whom we have or might have a commercial, legal, operational or ethical responsibility.
- Proximity: those who need our immediate attention on financial, economic, social or environment issues.
- Influence: those who could generate an impact on the strategy or on our decision-making.
- Different perspective: those who can lead us to a new understanding about a specific situation or the identification of new opportunities.

The Company has designed a tool called the Sustainability Self-Assessment that allows the organization to measure the maturity state of its processes in each operation, including community engagement.

**C12.3**

**(C12.3) ¿Participa en actividades que podrían influir de manera directa o indirecta en las políticas públicas relacionadas con el clima mediante alguna de las siguientes opciones?**

- Interacción directa con los responsables de las políticas públicas
- Asociaciones comerciales
- Otro

**C12.3a**

**(C12.3a) ¿En qué cuestiones ha participado de manera directa o indirecta con los responsables de las políticas públicas?**

Foco de la legislación	Puesto corporativo	Detalles de la vinculación	Solución legislativa propuesta
Informes sobre carbono obligatorios	Asistencia	Colombia has been moving forward in a development of a Low Carbon Strategy for the country; and for that, several round tables with industry representatives are being carried out. Argos has been participating in those proposing international standards on GHG measurement system for Mandatory carbon reporting. In fact, Argos with support of Associations like Inter-American Cement Federation (FICEM, for its acronym in Spanish) has suggested the government to include CSI's Cement CO2 and Energy Protocol (now GCCA GCCA's methodology) for the cement sector as the one applicable to the cement sector, as it is the strongest international system in the industry which allows mandatory carbon reporting, benchmarking with same industry in different countries or areas around the world.	Include in the mandatory carbon reporting regulation the CSI's Cement CO2 and Energy Protocol (now GCCA's methodology) as the one applicable to the cement sector in Colombia.
Informes sobre carbono obligatorios	Asistencia	There is a task force in Dominican Republic conformed by the cement guild in this country, the Dominican Association of Portland Cement Producers (ADOCEM for its acronym in Spanish), the National Council for Climate Change and Clean Development Mechanism (CNCCMDL for its acronym in Spanish) and the Ministry of Environment and Natural Resources of the Dominican Republic. This task force has worked in the formulation and development of system for measurement, reporting and verification (MRV for its acronym in Spanish) of greenhouse gas emissions from the cement industry.	Include in the system of measurement, reporting and verification of greenhouse gas emissions from the cement industry, in Dominican Republic, the CSI's database of CO2 and energy performance of cement industry, named Getting the Numbers Right.
Otro. Especifique. (Other climate change regulations)	Asistencia con excepciones menores	Argos has been working through an internal multidisciplinary team to analyze the risks and opportunities for the company of any related climate change regulation. In last years, the company has analyzed the Climate Change laws for Colombia, which aim to regulate actions to adapt to climate change and actions to reduce greenhouse gases emission in the country. Argos has been shared its position regarding these laws through the official communication channel established by Colombian government.	Support the establishment of a CO2 Report and Verification Mechanism for the country. Argos has suggested modifications to law drafts in order to make it clearer.
Impuesto al carbono	Asistencia con excepciones menores	Colombian government introduced in 2016 a Carbon Tax over liquids fuels and natural gas. Argos followed the discussion, analyzed implication for the cement sector, set its position and let the government know comments.	Economic instruments to reduce CO2 emissions may avoid or reduce the risk of carbon leaking to be effective. Its implementation should analyze the economic context of each country. Regarding carbon pricing mechanisms is important to consider those economic instruments that promotes the efficiency and innovation, like the emissions trading systems.

## C12.3b

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### (C12.3b) ¿Está usted en la Junta directiva de alguna asociación comercial o aporta fondos más allá de la afiliación?

Sí

## C12.3c

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### (C12.3c) Ingrese los detalles de esas asociaciones comerciales que probablemente adopten una posición respecto de la legislación sobre el cambio climático.

#### Asociación comercial

US Green Building Council (USGBC)

#### ¿Su posición con respecto al cambio climático coincide con la de ellos?

Coincide

#### Explique la posición de la asociación comercial

The US Green Building Council is an organization which promotes the sustainability in construction, design and operation of buildings through its Leadership in Energy and Environmental Design (LEED) green building program.

#### ¿Cómo ha influenciado o intenta influenciar la posición?

Argos is member of the Colombia Green Building Council through Grupo Argos and continue to be members of the USGBC of the Panama Green Building Council. In 2018, more than 5,600 projects were certified under the LEED® system in the markets where Argos has a presence.

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#### Asociación comercial

Asociación Nacional de Industriales (National Association of Industrialists) – ANDI

#### ¿Su posición con respecto al cambio climático coincide con la de ellos?

Coincide

#### Explique la posición de la asociación comercial

Support the efforts of Colombian government toward the reduction of greenhouse gases emissions and guarantee the inclusion of industry concern in the discussion of any climate change related legislation to preserve the competitiveness of the country.

#### ¿Cómo ha influenciado o intenta influenciar la posición?

During last years Argos representatives, have generated inputs in many CO2 related initiatives like: CO2 tax, Energy Efficiency Market Collection systems and environmental management of used tires, Climate Change Law, NDC (Nationally Determined Contributions). Argos supports the inclusion of the agenda led by the CO2 and Energy Protocol, Cement Technology Road Map and the CO2 Reduction Roadmap for Latin America (led by Inter-American Cement Federation - FICEM, for its acronym in Spanish).

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#### Asociación comercial

Federación Interamericana del Cemento (Inter-American Cement Federation) – FICEM

#### ¿Su posición con respecto al cambio climático coincide con la de ellos?

Coincide

#### Explique la posición de la asociación comercial

Support the efforts of the Latin American cement industry to reduce CO2 emissions according to the WBCSD agenda.

#### ¿Cómo ha influenciado o intenta influenciar la posición?

Argos supports the inclusion of the agenda led by the CO2 and Energy Protocol and the Cement Technology Road Map. Since 2017, with the leadership of FICEM, Latin American cement industry has been working in the development of its own roadmap for reduction of CO2 emissions (similar to Cement Technology Roadmap – CSI) to specify the contribution that Latin America cement plants could make to achieve the GHG reduction targets established in each country, and the company has supported the effort. Argos has participated in workshops, discussion tables, and in reviewing the generated documents by FICEM regarding this issue.

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#### Asociación comercial

Asociación Colombiana de Productores de Concreto (Colombian Association of Concrete Producers) - ASOCRETO

#### ¿Su posición con respecto al cambio climático coincide con la de ellos?

Coincide

#### Explique la posición de la asociación comercial

Asocreto represents the cement and concrete companies located in Colombia. It supports the efforts of Colombian government toward the reduction of greenhouse gases emissions and guarantee the inclusion of industry concern in the discussion of any climate change related legislation to preserve the competitiveness of the country. Since 2016, Asocreto on behalf of its represented companies has accompanied the initiative of the Colombian government to move forward in a national system for the monitoring, verification and reporting of GHG emissions. The Colombian government was promoting the development of a methodological guide for the determination of the carbon footprint in organizations of the cement sector as a tool for the monitoring and reporting of GHG emissions.

#### ¿Cómo ha influenciado o intenta influenciar la posición?

Argos supports the inclusion of the agenda led by the CO2 and Energy Protocol, Cement Technology Road Map and the CO2 Reduction Roadmap for Latin America (led by Inter-American Cement Federation – FICEM). Argos position is to adopt the "CO2 and Energy Accounting and Reporting Standard for the Cement Industry" published by the Cement Sustainability Initiative (now GCCA - global cement and concrete association) (2011) as the local guideline to be applied in the country.

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## C12.3e

### **(C12.3e) Proporcione detalles de otras actividades de compromiso que usted efectúa**

We believe that the creation of sustainable value is based on relationships of trust and transparent dialogue with our stakeholders through mechanisms that open up channels to discussions topics that are relevant to everyone. In this way, we can identify common values that allow our management program to be valued and understood by those who engage with us and look for common goals that leverage growth, not just for the company, but for those who become our allies in building dreams and transforming lives.

In 2019, we updated the materiality matrix through our Sustainability Dialogues. More than 2,400 people participated in these in the three

regions where we operate. This activity allowed us to learn firsthand about the issues that stakeholders identify as a priority, as well as those that impact them and their relationship with Argos. As a result, we have engagement goals for each of our eight priority stakeholders:

- Employees: Attract and develop the best talent, which we see as the critical factor in achieving our higher purpose.
- Customers: Provide extraordinary solutions and be a strategic ally in building dreams and developing society.
- Suppliers: Establish a mutual growth relationship whereby suppliers become our allies in creating value for customers and society.
- Investors: Act with transparency and maximize the creation of sustainable value.
- Communities: Stimulate development through in-depth knowledge of our communities and proper management of identified development opportunities.
- Media: Communicate our work transparently through suitable channels and making this the starting point for building relationship of trust with other stakeholders.
- Associations and unions: Actively participate in forums that seek the appropriate industry positioning by identifying and building best practices that strengthen various trade associations.
- Authorities: Build relationships based on trust and transparency that foster collaboration for territorial development.

We have identified that it is of great relevance to include the issue of climate change and sustainable construction in the relationship agenda with stakeholders, through the relationship mechanisms established by the company:

- Employees: face to face communications forums, intranet and virtual channel, Internal boards and Channels, Performance Management, Transparency line, Social networks, Sustainability dialogues
- Customers: Advice and support, Customer service, Transparency line, Market research
- Suppliers: Personalized tracking, Transparency line, Supplier assessment, Integrated Report, Sustainability Dialogues
- Investors: Personal meetings, Conference Call, General Shareholders Meeting, Integrated Report, Website, Direct communication via mail, direct line, among others
- Communities: Local engagement plan, Sustainability Dialogues, Sustainability Week Transparency Line, Community committees, Socio-economic footprint
- Media: Ongoing communication, Phone calls, Meetings and press conferences, Press releases and other resources, Mail, Press office, Website, Social networks
- Associations and unions: Joint workshops Sustainability Dialogues Website Integrated Report
- Authorities: Integrated Report, Website, Local Relationship Plan, Transparency Line.

In each of our operations we have local stakeholders management teams, which are led by the manager or person responsible for the operation, supported by the community leader and the participation of the leader of the Environmental area. This has allowed us to consolidate a multidisciplinary team with diverse perspectives that enrich the design of possible initiatives in the territory .

### **C12.3f**

#### **(C12.3f) ¿Qué procesos tiene implementados para garantizar que todas sus actividades directas e indirectas que influyen las políticas sean coherentes con su estrategia general respecto del cambio climático?**

Company's Environmental Strategy is approved by the Executive Committee and the Board of Directors of Argos. This strategy includes the climate change pillar which guides the strategy of the company regarding climate change and allows us to develop more efficient processes and generate new business opportunities. Training in all organizational levels have been developed to ensure a common understanding of the Environmental Strategy.

Position papers and communications guidelines regarding climate change issues are prepared, approved and distributed to the authorized speakers of the company to assure that the messages in any scenario are consistent with the climate change strategy of the company. Internal and external communications are revised by Communications, Sustainability and Environmental Departments to ensure they are aligned to the overall strategy of the company.

### **C12.4**

#### **(C12.4) ¿Ha publicado información sobre la respuesta de su empresa al cambio climático y el desempeño en materia de emisiones de GEI del año de reporte, en**

**lugares diferentes a CDP? En caso afirmativo, adjunte la(s) publicación(es)**

**Publicación**

En informes convencionales

**Estado**

Completo

**Adjunte el documento**

Independent Review Report\_Deloitte.pdf  
2019 Integrated Report.pdf

**Referencia de página/sección**

- Integrated-Report-2019. pdf : see pages 84 - 89 for Argos climate change strategy - Independent review report.pdf: see pages 1-7 for Deloitte independent review report.

**Elementos del contenido**

Gobernanza  
Estrategia  
Riesgos y oportunidades  
Cifras de emisiones  
Metas de emisión  
Otras métricas  
Otro. Especifique. (Argos Corporate Sustainability Reports)

**Comentario**

The Integrated Report 2019 can be downloaded from the link: <https://sostenibilidad.argos.co/Integrated-Report-En>

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**Publicación**

Otro. Especifique. (Environmental Product Declarations (EPD))

**Estado**

Completo

**Adjunte el documento**

EPD USA Prime green 4070.pdf  
EPD Texas.pdf  
EPD USA Prime green 4072.pdf  
EPD USA Prime green 4102.pdf  
EPD Panama.pdf

**Referencia de página/sección**

**Elementos del contenido**

Cifras de emisiones  
Otras métricas  
Otro. Especifique. (Environmental Product Declarations (Global Warming indicator))

**Comentario**

EPDs can be downloaded from the following links: - EPD prime Green comercial mix #4102: <https://info.nsf.org/Certified/Sustain/ProdCert/EPD10019.pdf> - EPD prime Green comercial mix # 4070: <https://info.nsf.org/Certified/Sustain/ProdCert/EPD10020.pdf> - EPD prime Green comercial mix #4072: <https://info.nsf.org/Certified/Sustain/ProdCert/EPD10018.pdf>

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**Publicación**

En informes convencionales

**Estado**

Completo

**Adjunte el documento**

Sustainability Yearbook 2020 versión español.pdf  
DJSI\_Components\_World.pdf

**Referencia de página/sección**

- The Sustainability Yearbook 2020: see page 94 (Building Materials - Leaders in Sustainability 2020) - Dow Jones Sustainability World Index: see page 4

**Elementos del contenido**

Gobernanza  
Estrategia  
Riesgos y oportunidades  
Cifras de emisiones  
Otras métricas

**Comentario**

We attach the documents showing that Argos submitted the Coorporate Sustainability Assesment to RobecoSAM AG in 2019 , that we were awarded the Gold Class distinction in the SAM S&P Sustainability Yearbook 2020 and that we were listed in the Dow Jones Global Sustainability Index as one of the world's most sustainable cement manufacturers (for the seventh consecutive year) .

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**Publicación**

En informes convencionales

**Estado**

Completo

**Adjunte el documento**

Screenshot\_Upload\_29.10.2019.pdf

**Referencia de página/sección**

**Elementos del contenido**

Cifras de emisiones  
Otras métricas

**Comentario**

We are attaching the screenshot taken from the PWC platform (organization that manages the GNR), to show that in 2019 the reports of Cementos Argos to the GNR were uploaded to that platform.

C15. Firma

C-FI

**(C-FI) Utilice este campo para proporcionar cualquier información adicional o contexto que sienta es relevante para la respuesta de su organización. Observe que este campo es opcional y no se califica.**

C15.1

**(C15.1) Proporcione detalles de la persona que ha firmado (aprobado) su cuestionario sobre el cambio climático del CDP.**

	Cargo	Categoría del puesto correspondiente
Fila 1	I Promise, Environment and Community engagement Sr. Director	Gerente de seguridad, salud y medio ambiente

Enviar respuesta

**¿En qué idioma envía su respuesta?**

Inglés

**Confirme cómo CDP debe manejar su respuesta**

	Estoy enviando a	Envío público o no público
Estoy enviando mi respuesta	Inversionistas	Público

**Confirme lo siguiente**

He leído y acepto los Términos y Condiciones aplicables