Sacyr - Climate Change 2020



C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Sacyr is a global group listed in the Spanish stock market committed to meeting any challenge to transform society. It has been active for over 30 years and operates in a wide range of countries across the five continents to improve infrastructure and services to citizens. The company is structured in four different areas of activity:

· Engineering and infrastructure: focusing mainly on the construction of all manner of civil works and residential and non-residential building infrastructure;

 \cdot Concessions: managing infrastructures such as motorways, hospitals, transport hubs, etc.;

· Services: specializing in the management of the environment, water, and multiservice; and

· Industrial: covering the promotion, performance, start-up and operation of engineering and industrial construction projects.

Sustainability is one of the main cornerstones of Sacyr Group's activities and the company has made big advances to contribute towards its development in those societies where it operates. In this sense, Sacyr's corporate vision is to be a leading Group with an international focus that is seen as a benchmark in developing innovative, high-value projects, that grows steadily and profitably, providing quality employment opportunities for its employees while being environmentally friendly.

Within its commitment to sustainability and the fight against climate change, Sacyr started reporting to CDP in 2018 and is currently developing its Climate Change Strategy.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting	Select the number of past reporting years you will be providing emissions data
			years	for
Reporting vear	January 1 2019	December 31 2019	No	<not applicable=""></not>

C0.3

(C0.3) Select the countries/areas for which you will be supplying data. Angola
	Australia
	Cabo Verde
	Chile
	Colombia
	Ecuador
	Gibraltar
	Ireland
	Mexico
	Mozambique
	Oman
	Paraguay
	Peru
	Portugal
	Qatar
	Spain
	United Kingdom of Great Britain and Northern Ireland
	United States of America
	Uruguay

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response. EUR

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory. Operational control

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization? $\ensuremath{\mathsf{Yes}}$

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of	Please explain
individual(s)	
Chief Executive Officer	Sacyr's Chief Executive Officer, who now is as well the President of the company, is the maximum responsible of climate-related issues. He heads the Sustainability Committee, which gathers every month and aside from overviewing the development of activities and strategies, he provides approval for the following: -Strategic plans and long-term policies -Quality, Environmental and Energy Management Programs that contain the objectives and ensure the availability of the necessary resources for its fulfillment -Necessary resources to achieve the objectives set in the Management
(CEO)	Programs As an example of significant decision took by our CEO, he approved and signed Sacyr's commitment with SBTi in December 2019 by which we expect to establish, aligned with the path our climate strategy is setting, a science-based target within the next two years.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board- level oversight	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Monitoring implementation and performance of objectives Monitoring and overseeing progress against goals and targets for addressing climate-related issues	<not Applicable></not 	The Head of the Quality, Environment and Energy Director communicates to the COO the Quality, Environment and Energy Department's main issues. The COO is part of Sacyr's board, along with the CEO/President and other C-suite officers. The board meets on a monthly basis and climate-related topics are covered in some of them.

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Name of the position(s) and/or committee(s)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
Chief Executive Officer (CEO)	<not Applicable></not 	Both assessing and managing climate-related risks and opportunities	<not applicable=""></not>	More frequently than quarterly

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climaterelated issues are monitored (do not include the names of individuals).

Sacyr's CEO holds the highest position in the company. At the moment, the responsibilities from being both CEO and President lay on the same person. For this reason, he provides approval for strategic plans and long-term policies; Quality, Environmental and Energy Management Programs that contain the objectives and ensure the availability of the necessary resources for its fulfillment; as well as the necessary resources to achieve the objectives set in the Management Programs. He is particularly involved in overviewing climate related issues through the Sustainability Committee, which gathers on a monthly basis and is led by him. This Committee is responsible for developing and implementing sustainability actions within a strategy aligned with the ODS (Sustainable Development Goals).

The COO is as well part of the board and the Sustainability Committee and lies underneath Sacyr's CEO. He is in charge of overviewing the company's internal and external context; managing and coordinating environmental and climate-related activities, as well as their risks; supervising the design and implementation of Sacyr's environmental policies; and informing Sacyr's Quality, Environment and Energy Director about environmental or energy requirements contained in the agreements or commitments signed by the company.

The Quality, Environment and Energy Director stems from Corporate General Management, which is led by the COO. The Director is in charge of designing the proposing Action Plans, coordinating their implementation with all involved departments and geographies, as well as preparing the Action Plans' follow-up and establishing the level of compliance with its goals. She is responsible for the following activities:

- · Design of the company's environmental policies
- · Identification of Sacyr's internal and external context along with the Heads of other Departments
- · Identification of stakeholders' needs
- · Identification and assessment of risks, as well as threats and opportunities, with the pertinent Heads of Departments
- Design of action plans derived from risks and opportunities assessed as moderate, important or critical
- · Execution of the action plans' follow-up
- Development of Management Programs and establishment of the mechanisms to control their compliance, as well as provision of the necessary resources to achieve the objectives
- · Compilation and analysis of regulations that may be applicable to Sacyr
- · Draft of the annual report on general compliance with legal requirements
- · Compliance with legal requirements, environmental obligations and procedures

The Integrated Management System Committee, also named internally Quality, Environment and Energy Committee, is formed by the positions aforementioned and other elected members of the Quality, Environment and Energy Department and conducts the following activities:

- Development of a context and stakeholders' study
- Final consolidation of risks and opportunities

• Approval of actions aimed at reducing risk impact and defining the goal for the residual risk (these actions will become part of the Master Plan, which will be approved by the aforementioned Sustainability Committee.).

· Analysis of the System Review Report

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related	Comment
	issues	
Row 1	Yes	Climate-related issues are considered a key factor for the future development of our activities, that is why, aiming to align our actions to the best practices, Sacyr is offering monetary and no monetary incentives to top management and general employees linked to climate performance.

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive	Type of incentive	Activity inventivized	Comment
Chief Executive Officer (CEO)	Monetary reward	Emissions reduction target	The incentive awarded to the CEO is linked to strategical targets such as emission reduction targets through the following activities: -Design and approval of the Climate Change Strategy, which addresses the challenges and opportunities, both in the area of mitigation (reduction of greenhouse gas emissions, GHG) and adaptation (impacts derived from climate change) in the companyDesign and approve the company's climate change risk maps. Sustainability targets are established in a way that is totally aligned with the company's Strategic Plan, to ensure an optimum coherence. Aside from the monetary reward allocated, this position also benefits from non-monetary incentives, such as recognition within the organization that helps to improve motivation and environmental performance, through interviews, videos, talks, etc.
Chief Operating Officer (COO)	Monetary reward	Emissions reduction target	The incentive awarded to the COO is linked to strategical targets such as emission reduction targets through the following activities: -Design and approval of the Climate Change Strategy, which addresses the challenges and opportunities, both in the area of mitigation (reduction of greenhouse gas emissions, GHG) and adaptation (impacts derived from climate change) in the companyDesign and approve the company's climate change risk maps. Sustainability objectives are established in a way that is totally aligned with the company's Strategic Plan, to ensure an optimum coherence. Aside from the monetary reward allocated, this position also benefits from non-monetary incentives, such as recognition within the organization that helps to improve motivation and environmental performance, through interviews, videos, talks, etc.
Other, please specify (Head of Quality, Environment and Energy)	Monetary reward	Emissions reduction target	The incentive awarded to the Head of Quality, Environment and Energy is linked to strategical targets such as emission reduction targets through the following activities: - Implementation of the strategy and implementation of emission reduction plans for the periods 2021-2025, 2025-2035, 2035-2050, where emission reductions are quantified by periodTraining the company in climate change risks and their management. Sustainability objectives are established in a way that is totally aligned with the company's Strategic Plan, to ensure an optimum coherence. Aside from the monetary reward allocated, this position also benefits from non-monetary incentives, such as recognition within the organization that helps to improve motivation and environmental performance, through interviews, videos, talks, etc.
Other, please specify (Quality, Environment and Energy Management Team)	Monetary reward	Emissions reduction target	The incentive awarded to the Quality, Environment and Energy Management Team is linked to strategical targets such as emission reduction targets through the following activities: -Implementation of the strategy and implementation of emission reduction plans for the periods 2021-2025, 2025-2035, 2035 -2050, where emission reductions are quantified by periodTraining the company in climate change risks and their management. Sustainability objectives are established in a way that is totally aligned with the company's Strategic Plan, to ensure an optimum coherence. Aside from the monetary reward allocated, this position also benefits from non-monetary incentives, such as recognition within the organization that helps to improve motivation and environmental performance, through interviews, videos, talks, etc.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities? Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From	То	Comment
	(years)	(years)	
Short-term	0	5	The period corresponds with the years from 2020 to 2025, aligned with Sacyr's yet to be approved new Strategic Plan, which is why the company considers "short term" the years encompassed in that period.
Medium- term	5	15	The period corresponds with the years 2025 to 2035.
Long-term	15	30	The period corresponds with the years between 2035 and 2050 in order to encompass climate change projections.

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

Sacyr have develop and established a framework to assess, on a scale from low, medium, high and very high and based on probability and impact, the substantive financial and/or strategic impact on the business when identifying or assessing climate-related risks. The system considers aspects such as economic losses, cost overrun, health and safety, legal aspects, reputational issues, and delays on the delivery and their associated impacts, as all of them are considered to potentially affect and compromise the strategy and financial results of the company.

Sacyr can be clearly divided in four very different business units (Engineering and infrastructures, Concessions, Industrial and Services), reason why different thresholds have been defined for each one of them as neither volume of operations nor impact of the activities can be compared within them four. However, this is particularly relevant if an effect on the business affects our Concessions are (larger-scale projects), since it is the most important area of the company.

We consider a risk has the potential to substantively impact our business in financial terms if it gets over High or Very high levels, which, referring to each of the business units individually means:

- · Engineering and infrastructures: High (1.5M€ 3M€), Very High (>3M€)
- · Concessions: High (cost overrun between 5% 10% of expected costs), Very High (cost overrun of more than 10% of expected costs)
- · Industrial: High (500k€ 1000k€), Very High (>1000k€)
- Services: High (300k€ 1000k€), Very High (>1000k€)

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered

Direct operations Upstream Downstream

Risk management process

A specific climate-related risk management process

Frequency of assessment Annually

Time horizon(s) covered

Short-term Medium-term Long-term

Description of process

Sacyr has two relevant procedures in place regarding the company's analysis of risks: "Analysis of the context of the organization" and "Risk analysis methodology". This is the second year that Sacyr identifies and assesses its climate-related risks using the TCFD methodology. Previously, a general methodology was used to identify risks, and Action Plans were carried out when necessary. The Quality. Environment and Energy Department is responsible for identifying and assessing climate change-related risks and opportunities, along with other relevant heads of departments for each case. This exercise takes place annually and it studies the effects of climate change on internal issues related to the business model, human and material resources, supply chain, etc. along with stakeholders such as customers, analysts, investors, NGOs, employees, suppliers... The result of this study is a SWOT matrix from which the identified risks and opportunities are analyzed, assessed and managed according to the internal procedure "PG.01.08 Risks analysis. Methodology". As a starting point, a preliminary analysis was carried out through a comparative study of competitor's climate change management strategies. This analysis considered both environmental policies and climate change related issues identified by other companies within the sector. Additionally, a bibliographic search took place and identified climate change related risks and opportunities that could potentially have an impact on Sacyr's different businesses. Once identified, these results were analyzed with the heads of Sacvr's different businesses to better understand and contrast their relevance on Sacvr's activities and geographical areas. In this sense, a qualitative assessment was carried out based on the probability of occurrence of each risk / opportunity and its impacts on Sacyr's financial accounts. It assessed past conditions, implemented measures, impacts on annual accounts (changes in direct or indirect costs, income, expenditure or investment), performance potential and time horizon (short, medium, long), as well as any other additional observations. In addition, a priority value is calculated for each one through an assessment of the probability of occurrence and the impact on the company's image, breach of contract, billing and internal costs. Thus, risks / opportunities are prioritized according to the need to act on them as trivial, tolerable, moderate, important or critical. Once climate-related risks and opportunities are identified and assessed, and depending on the result, the Quality, Environment and Energy Committee approves the acceptable level of risk and decides the specific managing method to each one of them. The possible managing methods are: • Acceptance of the risk: assuming the risk. • Avoidance of risk: eliminating or not continuing with the activity that causes the risk. • Reduction of the risk: applying measures to reduce its probability of occurrence or its impact. • Transfer or share of the risk: distributing the risk with other parties, for example, through insurance or other contracts. Acceptance of risk is the option chosen by default for those risks assessed as trivial, not incurring a substantive financial impact nor affecting the company's strategy. In the case of tolerable or moderate risks, they can be accepted as well by establishing a follow-up on a regular basis in order to control they don't evolve into a greater risk. Important or critical risks, that is, those above the acceptable risk value (those classified as high or very high), require establishing a detailed Action Plan with the goal of reducing or avoiding said risk. These Action Plans include actions to be carried out divided into milestones. assigned resources and managers, as well as a planning of their execution. The Quality, Environment and Energy Department is in charge of defining these Action Plans and subjecting them to the approval of the Committee. These Action Plans are integrated into the Management System Plan. In some cases, the Committee may decide to assume the risk without establishing an Action Plan. In order to do so, they must justify their decision. However, it is not the common situation. The final expected risk reduction and the level of risk to be achieved are included on Sacyr's risk map, which not only covers direct operations but the entire value chain. The 2017-2022 Systems Management Plan includes a guideline on climate change for which several Action Plans have already been developed having a direct impact on carbon management. An example of this is Action Plan 7 - Climate Change Strategy, which is currently in progress and it is expected to be finally approved and launched by the end of the year. i) Case study (physical): The increased severity and frequency of cyclones and hurricanes was identified thanks to our scenario analysis assessment as a risk for us with a medium probability and magnitude for a medium-term horizon. The level of risk has been defined as tolerable, with a focus on Mexico and the US. They would cause material damage and temporary cessation of production (increased direct and indirect costs). However, aware of the situation, the management processes defined towards the reduction of the risk and basic safety and contingency protocols are considered and implemented from the very first stages of the operation in order to limit the effect and not incur in a substantive financial impact. ii) Case study (transition): As an example of the identification, assessment and response to a transition risk and opportunity, the increase of transparency, reporting requirement and climate-related stakeholder interest was identified on our benchmark as a likely potential risk to consider in the short-term. Then, once evaluated by the relevant business experts, it was finally included in our SWOT matrix under the "legal context" driving factor, and treated as an opportunity as well aiming to show good performance and gain reputation by voluntary complying in advance with recommendations that may become mandatory in the future (measure to reduce its probability of occurrence or its impact). This include mitigation actions towards increasing the awareness of the corporate carbon footprint and life cycle of products/services such as calculation and registration in the Carbon Footprint Registry of the OECC-Spanish Office of Climate Change, verification of the carbon footprint, definition of "Climate projects" for emissions' reduction or the change from a linear economy to a circular economy.

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Sacyr is subject to different regulations since its activity is carried out in different countries. For this reason, and considering TCFD recommendations, two transitional scenarios have been analyzed. In this sense, current regulation regarding GHG emissions, infrastructure resilience, water management, energy consumption etc. has been analyzed to identify potential risks on Sacyr's activity. An example of current regulation risk that is being monitored by Sacyr is the regulation of carbon emissions. These risks are included in the annual climate change risks and opportunities analysis,
Emerging regulation	Relevant, always included	Sacyr is subject to different regulation due to the fact that its activity is carried out in different countries. For this reason, and considering TCFD recommendations, two transitional scenarios have been analyzed. Taking current regulation as a starting point, regulation needed to achieve a low carbon economy (restriction on GHG emissions, sustainable use of natural resources etc.) has been analyzed to identify potential risks on Sacyr's activity. An example of emerging regulation risk that is being monitored by Sacyr is greater reporting obligations of GHG emissions. These risks are included in the annual climate change risks and opportunities analysis. For example, in Colombia they have a carbon tax and an increase could be generated in the case of fuels.
Technology	Relevant, always included	Sacyr uses a wide variety of technology due to the broad spectrum of activities that it carries out. For this reason, technology risks such as the cost of low carbon technology etc. are analyzed. An example of technology risk that is being monitored by Sacyr is the need to substitute products and services for those that emit less GHG emissions. These risks are included in the annual climate change risks and opportunities analysis. For example, in Spain, the facilities are affected by regulations IPPC, and mandatory incorporation of the best techniques available in the sector of large combustion plants.
Legal	Relevant, sometimes included	Sacyr is potentially subject to different legal claims since its activity is carried out in different countries. Legal aspects are considered in the regulation aspects of the climate related risks assessment. An example of a legal risk that is being monitored by Sacyr is the exposure to litigations related to climate change. These risks are included in the annual climate change risks and opportunities analysis. For example, in mining issues, some works that have almost been launched have been canceled. Concessions show greater awareness of companies about the risk of regulatory non-compliance. In Mexico there is a suspension of activities in an asphalt plant, but no fines have been defined yet.
Market	Relevant, always included	Sacyr carries out its activity globally. For this reason, it analyzes market climate related risks such as changes in consumer behavior due to awareness, rise in fossil fuel prices etc. An example a market risk that is being monitored by Sacyr is changes in consumer behavior due to a higher awareness on climate change matters. These risks are included in the annual climate change risks and opportunities analysis. For example, in concessions, the existing demand resides mainly in the adaptation of infrastructures that incorporate new technologies like charging points.
Reputation	Relevant, always included	Sacyr carries out its activity globally in a wide spectrum of activities. For this reason, it analyzes reputation climate related risks such as lack of transparency etc. An example of a reputation risk that is being monitored by Sacyr is the stigmatization of the sector. These risks are included in the annual climate change risks and opportunities analysis.
Acute physical	Relevant, always included	Sacyr is exposed to climate change in every geographic area where it carries out its activity. For this reason, and taking into account TCFD recommendations, two climate scenarios have been analyzed. In this sense, regionalized climate change projections extreme weather events such as cyclones, droughts, heat waves etc. have been identified, and their potential impacts have been assessed. An example of acute physical risk that is being monitored by Sacyr is landslides. These risks are included in the annual climate change risks and opportunities analysis. For example, there have been work delays in Mexico, which requires reprogramming of the contracts, although these costs are absorbed by the client. Work programs are carried out with low yields in the rainy seasons based on records of previous years and depending on the type of work and the region, indirect costs are determined according to each project.
Chronic physical	Relevant, always included	Sacyr is exposed to climate change in every geographic area where it carries out its activity. For this reason, and taking into account TCFD recommendations, two climate scenarios have been analyzed. In this sense, regionalized climate change projections for temperature rise, change in precipitation and sea level rise have been identified, and their potential impacts have been assessed. An example of chronic physical risk that is being monitored by Sacyr is the increase of temperatures. These risks are included in the annual climate change risks and opportunities analysis. For example, in Mexico, due to increase of temperatures, personnel have suffered from heat stroke (2 isolated cases) who have had to stop working for a couple of hours.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business? Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical Increased severity and frequency of extreme weather events such as cyclones and floods

Primary potential financial impact

Increased capital expenditures

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

Landslides derived from the increased severity of extreme weather events have been identified as a potential physical risk for Sacyr. They are felt globally throughout the company in uncommon situations, but more notoriously in Peru and Colombia, where we have operations of our four business areas and are positioned as one of the largest infrastructure company in the country (1st in Colombia). In particular, based on our assessments we have concluded that landslides affect mainly our business areas of Engineering and Infrastructures and Concessions as they can damage and disrupt our assets and work (bridges, motorways, transport interchanges, etc.). They impact Sacyr mainly by causing delays in construction sites, increasing needs in slope maintenance and generally in road operations. These impacts cause interruptions in roads, affecting vehicle traffic and therefore reducing income. Also, maintenance costs increase due to an increment associated to drainage needs, construction and services.

Time horizon

Short-term

Likelihood Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency) 1500000

Potential financial impact figure – maximum (currency) 3750000

Explanation of financial impact figure

Based on historical events and previous experiences, we estimate that a delay of between 4 and 6 months (the estimated time it takes to return to normal operating conditions in the event of a severe landslide) could result in a 10 to 25% capital cost overrun on the amount initially planned. Considering an average construction cost for a specific area potentially affected by a landslide (roundabout, road section, tunnel section, etc) of 15M euros, the financial impact that this type of disruption in its construction could entail would be in the range of 1.5M euros to 3.75M euros. 15,000,000€*10%=1,500,000€*25%=3,750,000€

Cost of response to risk

7656983.37

Description of response and explanation of cost calculation

With the aim of improving our environmental performance, at Sacyr Group we carry out a series of environmental initiatives to reduce environmental risks, enhance climaterelated opportunities, guarantee compliance with legal environmental requirements, the prevention of pollution, the adoption of energy-saving and efficiency measures, the improvement of waste management and the increase of environmental training and awareness, among others. Senior management has a clear focus on the Climate Change Strategy the Group is currently designing (expected to be released by the end of the year), in which we have been working on throughout 2019. It entails of a roadmap that establishes a common framework on carbon footprint management: 1. A vision on climate change and its impact on the organization, considering identified risks and opportunities. 2. Management guidelines and lines of action. 3. Targets focus on three horizons: short (2020-2025), medium (2025-2035) and long term (2035-2050). 4. Action packages derived from targets. These actions demonstrate Sacyr's gradual adaptation and determination in the fight against climate change. Complementary to this upcoming strategy, Sacyr is currently analysing and managing the climate-related risks and opportunities using the TCFD methodology for the first time. This work includes response definition for each specific risk and opportunity, including mitigation, adaptation and realization plans and measures. This is the reason why, in the short-term, we consider this first assessment fundamental to set a solid base for our future management actions. Expenditure and investments. Disaggregating this figure by country and business area, particularly for our Colombia and Perú infrastructure and concessions operations, it encompasses 7,628,909.20€ (Colombia) and 28,074.17€ (Perú), therefore, we understand our cost of response to the risk of landslides is its sum: 7,628,909.20€ + 28,074.17€ = 7,656,983.37 €.

Comment

Identifier

Risk 2

Where in the value chain does the risk driver occur? Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation Other, please specify (Exposure to energy consumption limits)

Primary potential financial impact

Decreased revenues due to reduced demand for products and services

Climate risk type mapped to traditional financial services industry risk classification <Not Applicable>

Company-specific description

Severe energy consumption regulation has been identified as a potential transition risk for Sacyr. Taking into account the fact that Sacyr carries out its activity in a wide range of different countries, the company has to be up to date with all energy regulation that might affect its services as a high-volume consumer. There are different regulations on buildings, hospital sector and services, and road infrastructure in both international and national framework which is then translated at the national, community and municipal levels. This affects all our business areas: construction, services, concessions and industrial. At the moment, regulation is still incipient and only affects a few contracts, particularly in buildings and the hospital sector. In Chile for example, new hospitals must be certified as a "sustainably constructed building", which is included as critical requirement in tenders that Sacyr participates in. Two of the major contracts awarded in 2019 were hospital constructions in Chile: "Sótero del Río" hospital in Santiago de Chile, Chile (710 beds and 39 operating theatres and 5 delivery suites) and the "Provincia Cordillera" hospital in Santiago de Chile, Chile (394 beds and 10 operating theatres). None of them could have been awarded if Sacyr could had not guarantee a sustainable building method, therefore not being able to fulfill energy and consumption requirements according to new emerging regulation could lead to worst performance in tenders and a reduction in our business activities and revenue.

Time horizon Medium-term

Likelihood About as likely as not

Magnitude of impact High

Are you able to provide a potential financial impact figure? Yes, a single figure estimate

Potential financial impact figure (currency) 1268000000

Potential financial impact figure – minimum (currency) <Not Applicable>

Explanation of financial impact figure

For Sacyr, this risk translates into a potential loss of revenue failing to comply with the energy requirements in public tenders. In order to estimate the financial impact, we considered historic data of contracts with certain sustainable and energy requirements: - In 2017, Sacyr was awarded the construction of a hospital in Chile under sustainable criteria: the "Quillota-Petorca" hospital for the amount of 127.6M€. - In 2018, the Villarrica Hospital for an amount of 44M€ and the "Alto Hospital" for an amount of 108M€ - In 2019, the "Sótero del Río" for 328M€, and the "Provincia Cordillera" hospital for 153M€. The trend in Chile is clear, and although we don't expect an exponential growth, the figure could reach a significant quantity that would incur a loss of revenues if Sacyr fails to comply with sustainable constructive requirements. Using historical data, we obtain the value of annual contracts with sustainable construction requirements: - 2017=127.6 M€ - 2018= 108M€+44 M€=152 M€ - 2019= 328 M€+153 M€= 481 M€. To estimate potential financial impact in 5-years' time, – in this case a potential decrease in revenues – we have taken the 3-year average based on historical information (127.6 + 152+481)/3)=253.53 M€ and we have applied it to a 5 year period = 253.53*5 years = 1268M€.

Cost of response to risk

1391583.37

Description of response and explanation of cost calculation

With the aim of improving our environmental performance, at Sacyr Group we carry out a series of environmental initiatives to reduce environmental risks, enhance climaterelated opportunities, guarantee compliance with legal environmental requirements, the prevention of pollution, the adoption of energy-saving and efficiency measures, the improvement of waste management and the increase of environmental training and awareness, among others. Senior management has a clear focus on the Climate Change Strategy the Group is currently designing (expected to be released by the end of the year), in which we have been working on throughout 2019. It entails of a roadmap that establishes a common framework on carbon footprint management: 1. A vision on climate change and its impact on the organization, considering identified risks and opportunities. 2. Management guidelines and lines of action. 3. Targets focus on three horizons: short (2020-2025), medium (2025-2035) and long term (2035-2050). 4. Action packages derived from targets. These actions demonstrate Sacyr's gradual adaptation and determination in the fight against climate change. Complementary to this upcoming strategy, Sacyr is currently analyzing and managing the climate-related risks and opportunities using the TCFD methodology for the first time. This work includes response definition for each specific risk and opportunity, including mitigation, adaptation and realization plans and measures. This is the reason why, in the short-term, as we consider this first assessment fundamental to set a solid base for our future management actions. Expenditure and investment in relation to these initiatives totalled more than €26 million in 2019 (€20 million in 2018). This figure is the result of gathering the cost of waste and emissions treatment and restoration (15,063,443.92€) and the cost of environmental management (11,344,663.96€), which include ordinary and extraordinary expenditures and R&D investments. Disaggregating this figure by country and business ar

Comment

Identifier Risk 3

Where in the value chain does the risk driver occur? Direct operations

Risk type & Primary climate-related risk driver

Chronic physical Changes in precipitation patterns and extreme variability in weather patterns

Primary potential financial impact

Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

Droughts and heat waves derived from the increased severity of extreme weather events have been identified as a potential physical risk for Sacyr. They affect the company in several regions such as the industrial plants located in the interior of Andalucía (south of Spain) where periods of drought and heat waves are frequent, the tropical dry forest area of Colombia, and most significantly water supply issues in Chile. These events have negative consequences for the company such as business interruptions. The area mostly affected by this risk is our operations in Chile, where Sacyr has detected a significant impactful increase in the cost of water supply due to shortages and water competition issues. Nevertheless, some other increases of electric consumption for refrigerating systems, decreases in the performance of the power generation processes, fires in the biomass park and increases in the accident rate can occur. By business unit, both the Industrial and Concessions business have observed an increase in costs, losses and impacts in the productivity of the workforce as well as operability of roads.

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure? Yes, a single figure estimate

Potential financial impact figure (currency) 403429.5

Potential financial impact figure – minimum (currency) <Not Applicable>

Potential financial impact figure – maximum (currency) <Not Applicable>

Explanation of financial impact figure

In Chile, where we see that this risk is more likely to materialize and have a real impact on the business, during 2019, and in line with previous years, a total of 51,721.73 m3 of water was consumed. The current average price at which we pay this volume is 1.35 euros/m3. In the areas with the greatest issues regarding water stress and competition for the country's resource, the price of water supply has risen in recent years to 2.91 euros/m3 (Coyhaique). That is why we estimate, considering the most

adverse situation and the national trend, that the increase in our operating costs due to Chile's water-stress situation could have a financial impact (cost overrun) of: a) Most favourable scenario= $51,721.73 \text{ m3} \times 1.35 \text{ m3} = 69,824.34 \text{ b}$) Least favourable scenario= $51,721.73 \text{ m3} \times 2.91 \text{ m3} = 150,510.23 \text{ c}$) Difference = 150,510.23 c69,824.34c=80,685.90c Considering a period of at least 5 years, the increase in water-related operational costs could amount to: $80,685.90 \text{ c} \times 39,429.50 \text{ c}$

Cost of response to risk

1704593.17

Description of response and explanation of cost calculation

With the aim of improving our environmental performance, at Sacyr Group we carry out a series of environmental initiatives to reduce environmental risks, enhance climaterelated opportunities, guarantee compliance with legal environmental requirements, the prevention of pollution, the adoption of energy-saving and efficiency measures, the improvement of waste management and the increase of environmental training and awareness, among others. Senior management has a clear focus on the Climate Change Strategy the Group is currently designing (expected to be released by the end of the year), in which we have been working on throughout 2019. It entails of a roadmap that establishes a common framework on carbon footprint management: 1. A vision on climate change and its impact on the organization, considering identified risks and opportunities. 2. Management guidelines and lines of action. 3. Targets focus on three horizons: short (2020-2025), medium (2025-2035) and long term (2035-2050). 4. Action packages derived from targets. These actions demonstrate Sacyr's gradual adaptation and determination in the fight against climate change. Complementary to this upcoming strategy, Sacyr is currently analyzing and managing the climate-related risks and opportunities using the TCFD methodology for the first time. This work includes response definition for each specific risk and opportunity, including mitigation, adaptation and realization plans and measures. This is the reason why, in the short-term, as we consider this first assessment fundamental to set a solid base for our future management actions. Expenditure and investment in relation to these initiatives totalled more than e26 million in 2019 (e20 million in 2018). This figure is the result of gathering the cost of waste and emissions treatments. Disaggregating this figure by country and business area, particularly for Chile operations, it encompasses 1,704,593.17 \in (Construction: 1,335,975.82 \in + Concessions: 55,607.55 \in + Services: 313,009.80 \in). We unde

Comment

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business? Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier Opp1

Where in the value chain does the opportunity occur? Direct operations

Opportunity type Products and services

Primary climate-related opportunity driver Development and/or expansion of low emission goods and services

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

The use of lower emissions sources of energy at a national level have been identified as a potential constructive opportunity for Sacyr. Infrastructures are increasingly framed in the strategic plans of countries against climate change, so it would be an opportunity to develop and invest in ideas that allow us to stand out over competitors. Spain as a country is indeed starting to introduce a requirement of percentage of energy proceeding from renewable sources, aiming to achieve a national 74% in 2030, so it's expected that renewable energy new infrastructures mean a potential source of projects and therefore revenues. This entails a great opportunity for us regarding in particular solar plants, in which we have experience, taking into account that the amount of photovoltaic power yet to be installed by 2030 to achieve the target is significantly big for a 10 years period.

Time horizon

Medium-term

Likelihood Likely

Magnitude of impact High

Are you able to provide a potential financial impact figure? Yes, an estimated range

Potential financial impact figure (currency) <Not Applicable>

Potential financial impact figure – minimum (currency) 264757200

Potential financial impact figure – maximum (currency) 529514400

Explanation of financial impact figure

According to the ambitious National Integrated Energy and Climate Plan (PNIEC) presented by the government in February 2019, the goal for Spain is to reach 30,000 megawatts of installed photovoltaic power by 2030. At the end of 2019 the installed power in Spain was about 7,800 MW. This means that in the next 10 years it will have to

be increased by 22,200 MWp. During 2019 Sacyr completed the construction of three solar photovoltaic plants in Ciudad Real (Spain), with an installed power of 150MWp. The green revenues of the year associated with solar energy amounted to 35,778,000 euros, so we can estimate that, in our operations in Spain, if we consider a share of the upcoming new operations between 5% and 10%, this will lead to a potential impact figure of: - Ratio revenues per MWp = $35,778,000 \in 150$ MWp= $238,520 \in MWp$ - Conservative scenario of revenues for Sacyr = $238,520 \in MWp^*(22,200$ MWp*5%)= $264,757,200 \in$ - More aggressive scenario of revenues for Sacyr = $238,520 \in MWp^*(22,200$ MWp*10%)= $529,514,400 \in$ Therefore, potential revenues of this opportunity can range from over 265 M \in to over 529 M \in , depending on Sacyr's share of solar construction in the following 10 years.

Cost to realize opportunity

44667

Strategy to realize opportunity and explanation of cost calculation

From our beginnings, innovation always played a leading role in our business strategy. A strategy that evolved over the years from a focus on R&D, largely based on unique projects and "hallmarks", to more disruptive innovation. Activities related to research, development and innovation are carried out in all business areas of the group. Regarding in particular innovation in solar energy operations and activities, we have recently developed as an example the Aurora Project, an autonomous solar energy generation mobile unit which led to a reduction in the use of gasoil in the generation of electricity for our park. Great progress has been achieved as well in some of our desalination plants (EMMASA, Tenerife) in reducing the ratio of energy consumed per cubic metre of water from 9 kWh/m³ in the old distillation plants to the current levels of around 3 kWh/m³ by increasing our solar energy production from 21,000 m³/day to 28,800 m³/ day. Sacyr invested in R&D development a total of 8M€ during 2019. Considering our total revenues in 2019 were 6,408M€, and those coming from solar energy totaled 35,778,000€, this leads to an estimated cost of realizing this opportunity of: 35.778M€/6,408M€*8M€=44,667€

Comment

Identifier

Opp2

Where in the value chain does the opportunity occur? Direct operations

.....

Opportunity type Markets

Primary climate-related opportunity driver

Other, please specify (Reputation benefits)

Primary potential financial impact

Other, please specify (Increased share price)

Company-specific description

Reputation is a great concern for Sacyr. Sustainability and the contribution to a decarbonized economy is a priority for the company, understood within our four business areas as a backbone and a strategical objective. Being recognized as a crucial agent towards a low carbon world at a global scale and reaching leadership regarding climate change is an opportunity to improve the reputation of the company. Better reputation can involve significant opportunities such as the increase the price of the shares or improvement of funding opportunities. Indeed, "Changes in investor preferences due to increased awareness of climate change" was identified as an interesting market opportunity in our latest TCFD aligned risk and opportunities assessment. Sacyr is listed in the Continuous Market of Spanish stock markets, so considering that there will be a significant reallocation of capital in the near future as investors are shifting its capital towards a low-carbon world, proving a good climate-related performance has the potential to improve reputation and consequently increase shares price.

Time horizon Medium-term

Likelihood More likely than not

Magnitude of impact High

Are you able to provide a potential financial impact figure? Yes, a single figure estimate

Potential financial impact figure (currency) 106590000

Potential financial impact figure – minimum (currency) <Not Applicable>

Potential financial impact figure – maximum (currency) <Not Applicable>

Explanation of financial impact figure

We estimate that the financial impact of this opportunity may have only takes into account the impact in the price of the share. Other indirect positive impacts that may subsequently be related were not considered in this quantification due to its variety and complexity. According to a study by Deloitte – "Finding the value in ESG performance", there are signs that if investors respond to positive environmental news, there is a 0.84% increase in stock returns. Therefore, if Sacyr continues to demonstrate good practices and is able to maintain high standings in Sustainability Indexes and ESG rankings, a potential gain of market value can be faced. The maximum potential financial impact (106.59 million Euros) has been calculated considering an increase of 0.84% over Sacyr's market capitalization for the period 2020-2030. The profits reported have been calculated for a 10 years' time-frame: The increased Sacyr's market capitalization for the period 2020-2030 is calculated as follows = (0.84%) *2019 Share price x Number of shares traded in 2019*number of years = (0.84%) x 2.261€x 582,005,888x10= 106.59 M€. This value corresponds to the 50% percentile and please note it is based on reporting year figures.

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

We estimate the cost of realizing this opportunity to be 0 as no particular budget is allocated in Sacyr to specific activities in this sense. We consider that fulfilling investors' expectations and being attractive for them over competitors in investment decisions is a result of the whole company performance in operations and management, which thanks to the awareness raise internally, integrates climate-related issues from its core cross-wide values.

Comment

Opp3

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type Resource efficiency

Primary climate-related opportunity driver

Use of more efficient production and distribution processes

Primary potential financial impact

Reduced indirect (operating) costs

Company-specific description

Energy efficient infrastructures and processes have been identified as a potential business opportunity for Sacyr. Indeed, aware of the significant cost savings and climate performance that this results in, energy efficiency has been stood out by out company as a priority area of innovation. Therefore, Sacyr has been using the latest and most advanced technologies to develop innovative projects that increase the efficiency, sustainability and security of our employees and on the services we provide. For instance, this include measures such as replacement of equipment and facilities with more efficient systems, optimization analysis of maintenance processes for equipment involving significant energy use (e.g., replacement of conventional lighting with LEDs, power generation using renewable sources (solar generation), and preventive maintenance of equipment with a high impact on electricity consumption), installation of LEDs, the installation of autonomous systems, or energy recovery units among others.

Time horizon Short-term

Likelihood Very likely

Magnitude of impact Medium

Are you able to provide a potential financial impact figure? Yes, a single figure estimate

Potential financial impact figure (currency) 1034593.76

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency) <Not Applicable>

Explanation of financial impact figure

In order to estimate the potential financial impact that the energy efficiency measures could have, we have studied the effect of our already implemented measures so that we can estimate our capacity to reduce electricity consumption for the coming years. Taking into account the measures implemented between 2018 and 2019, we see that based on the initial consumption of the selected projects we managed to reduce kWh by 4.54% from one year to another (32,596,198 in 2018 and 31,116,637 in 2019). Extrapolating this reduction achieved to the total electricity consumption of the company in 2019 (159,393.08MWh) and understanding the value of 4.54% as our estimated capacity of action, we can consider that, in the coming years, thanks to efficiency measures such as the installation of LEDs, the installation of autonomous systems, or energy recovery units among others, we can reduce this figure to 159,393.08MWh*4.54%*1000kWh/MWh= 7,236,445.83kWh. Taking into account that the average price we pay worldwide for energy is 0.14397 €/kWh, the energy savings could lead to a total economic saving of 7,236,445.83kWh * 0.14397 €/kWh = 1,034,593.76€

Cost to realize opportunity

564364.65

Strategy to realize opportunity and explanation of cost calculation

In 2019, 564,364.65€ were dedicated to the improvement of energy efficiency measures in our processes. The replacement of equipment and facilities with more efficient systems (e.g. new energy recovery systems on water treatment plants increasing efficiency form a 90% to a 98%), amounted to approximately 85% of total costs. The remaining 15% corresponded to measures of optimization analysis of maintenance processes for equipment involving significant energy use (e.g., replacement of conventional lighting with LEDs, power generation using renewable sources (solar generation), and preventive maintenance of equipment with a high impact on electricity consumption. Specific actions like the aforementioned are expected to keep being progressively implemented within all our four business areas in order to increase energy and cost savings and boost energy efficiency at the companies making up the Sacyr Group within the framework of the main principles governing its environmental policy. Total costs= 479,710€+846,55€=564,365 € (annual savings)

Comment

C3. Business Strategy

C3.1

(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning? Yes

C3.1a

(C3.1a) Does your organization use climate-related scenario analysis to inform its strategy? Yes, qualitative and quantitative

C3.1b

(C3.1b) Provide details of your organization's use of climate-related scenario analysis.

Climate- related scenarios and models applied	Details
RCP 4.5	This is the second year that a climate change risks analysis has been carried out at Sacyr considering the Task Force on Climate Financial Disclosure recommendations for our direct operations. For this reason, and in accordance with climate scenario analysis recommendations, RCP 4.5 was chosen in order to assess the potential risks of climate variables. The RCP 4.5 scenario shows a scenario in which important mitigation actions are carried out and, therefore, a peak of atmospheric emissions is reached around the year 2040 that begin to decrease afterwards. However, despite achieving a considerable reduction in emissions, the global warming projected by the end of the century exceeds the limit of 2°C established in the Paris Agreement. RCP 4.5 was chosen to portray a low emissions scenario using official climate projections of all the main countries were Sacyr operates for the medium-term time horizon. The time horizon was chosen to encompass relevant changes in climate projections as well as the lifespan of the company's infrastructures. The study analyzed temperature rise, precipitation change, sea level rise and extreme weather events. No changes were made to the assumptions established in the scenarios. The conclusions from the study showed an increase in temperature of 0,5-2°C, precipitation changes of -20% to 40%, an increase in intensity of extreme weather events and a rise in sea level of up to 0,54m by the end of the century depending on our countries of operation. This helped identify climate related risks and opportunities in all of Sacyr's business areas, which are currently being considered in the definition of Sacyr's Climate Change Strategy and corporate decisions. Based on these results, action line number 6 of the climate strategy has been established, namely "Reducing climate vulnerability". Some of the defined actions that have been decided upon are: -6.1. Aware of their importance, definition and revision of the protocol for the elaboration of climate scenarios in the risk analysis of each ne
RCP 8.5	This is the second year that a climate change risks analysis has been carried out at Sacyr considering the Task Force on Climate Financial Disclosure recommendations for our direct operations. For this reason, and in accordance with climate scenario analysis recommendations, RCP 8.5 was chosen in order to assess the potential risks of climate variables. RCP 8.5 shows a Business-as-Usual (BaU) scenario, in which GHG emissions would continue to increase at the current rate. It is the worst possible scenario of higher GHG emissions in the atmosphere and greater global warming. RCP 8.5 was chosen to portray a high emissions scenario using official climate projections of all the main countries were Sacyr operates for the medium-term time horizon. The time horizon was chosen to encompass relevant changes in climate projections as well as the lifespan of the company's infrastructures. The study analyzed temperature rise, precipitation change, sea level rise and extreme weather events. No changes were made to the assumptions established in the scenarios. The conclusions from the study showed an increase in temperature of 1-4°C, precipitation changes of -40% to 50%, a considerable increase in intensity of extreme weather events and a rise in sea level of up to 0,82m by the end of the century depending on countries. This helped identify climate related risks and opportunities in all of Sacyr's business areas, which are currently being considered in the definition of Sacyr's Climate Change Strategy and corporate decisions. Based on these results, action line number 6 of the climate strategy has been established, namely "Reducing climate vulnerability". Some of the defined actions that have been decided upon are: - 6.1. Aware of their importance, definition and revision of the protocol for the elaboration of climate exenarios in the risk analysis of each new project (including economic estimation of impact before and after mitigation, as well as detailed planning of actions associated with mitigation) 6.2. Definition an
IEA Sustainable development scenario	This is the second year that a climate change risks analysis has been carried out at Sacyr considering the Task Force on Climate Financial Disclosure recommendations for our direct operations. For this reason, and in accordance with climate scenario analysis recommendations, the Sustainable development scenario developed by IEA was analyzed. Assumptions were established in accordance with the scenarios and current and emerging regulations. In coherence with this scenario, in Spain, according to the preliminary draft of the Law on Climate Change and Energy Transition, a strong disbursement of € 200,000M is foreseen in the next 10 years, with the participation of companies from the industry, energy and construction sectors. As actions to be highlighted related to Sacyr's activity, it is emphasized that the rehabilitation of at least 100,000 homes per year will be encouraged to promote energy efficiency as before 2050 the Government will promote the rehabilitation of public and private buildings. Also, the Law on Sustainable Economy mentions renewable energies and energy efficiency as subject to the "promotion of productive sectors linked to science and innovation and greater capacity for internationalization" related to environmental protection, all of them areas in which Sacyr carries out its activity. Transparency, environmental taxation, electric or hybrid vehicles etc. are other factors subject to have an impact on Sacyr. The conclusions from the study helped identify climate related risks and opportunities in all of Sacyr's business areas, which are currently being considered in the definition of Sacyr's Climate Change Strategy and corporate decisions. Based on these results, action line number 6 of the climate strategy has been established, namely "Reducing climate vulnerability". Some of the defined actions that have been decided upon are: - 6.1. Aware of their importance, definition and revision of the protocol for the elaboration of climate scenarios in the risk analysis of each new project (including ec

C3.1d

(C3.1d) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate- related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	Sacyr is committed to reducing the climate risks that its products and services may generate, as well as strengthening opportunities in order to provide resilient product and services to future market and climate conditions and therefore secure the continuity of the business in the medium and long term. An example of this is the decision of driven part of our sale focus to the use of old tires in road construction. This type of recovery in construction allows the use of a large amount of waste, providing a solution for the current problem that entails the management of the huge number of tires generated in Spain yearly. It also reduces the use of natural resources needed for the construction of roads and landfills. The magnitude of impact could be quantified as the revenues that these products and services represent for the company.
Supply chain and/or value chain	Yes	Climate risks, such as extreme weather events, may affect Sacyr's supply chain due to delays in the provision of materials. Landslides are increasingly already occurring due to heavy or persistent rain, especially in Colombia or Peru. In these occasions, Sacyr has experienced delays in the completion of projects. The magnitude of impact could be quantified as the losses due to delays in projects' timetables. Taking into account this is a problem we may face again in the short term, our strategy has been affected by the need to develop eventuality plans and the need to always secure back-up suppliers.
Investment in R&D	Yes	Sacyr carries out R&D initiatives considering the new realities of climate change, in order to come up with solutions to reduce risks and strengthen opportunities in the short, medium and long term. An example of this was the launch in 2018 of the company-wide initiative Sacyr Circular through which employees were able to submit ideas to promote the efficient use of natural resources, as well as the use of materials' flows, energy and waste to generate more profitable and sustainable businesses. In 2019, we carried out the search for solutions to implement the winning project of the 2018 edition of the campaign (textile recycling). The magnitude of the impact could be quantified as the cost of implementing it. In addition, regarding innovation management, Sacyr iChallenges was launched, aimed at solving the business challenges posed by the company (open innovation). The number of employees involved in innovation projects is 217 and the number of projects under development is 47, reaching an investment in R&D greater than 8 million euros, which means that 6.6% of our net profit is reinvested in innovation.
Operations	Yes	Sacyr is exposed to a wide variety of climate-related risks and opportunities inherent to the different activities that the company carries out throughout its business areas, as well as the diverse geographical areas where it operates. During operations, the company experiences impacts derived from climate-related risks such as delays and needs for reconstruction due to extreme weather event. However, this also poses opportunities for new operations and contracts in the medium term, in fact, as an example of strategical decision recently taken an upcoming renewable energies business unit is about to start its operations. The magnitude of the impact could be quantified as the cost of implementing mitigation and adaptation measures in operations, and the revenues obtained from new operations derived from climate-related opportunities.

C3.1e

(C3.1e) Describe where and how climate-related risks and opportunities have influenced your financial planning.

Financial planning elements that have been influenced	Description of influence
Row Revenues 1 Direct cost Capital expenditur Capital allocation Acquisition and divestment Assets	For Sacyr, climate change offers major opportunities for the growth, development and competitiveness of its business. Climate-related risks and opportunities have influenced our short-medium term financial planning. The increasing need for low carbon products and services, as well as efficient and sustainable infrastructures allow us to access to new contracts and an increase in revenues. The magnitude of the impact could be quantified as the revenues obtained from low carbon products and services offered as a response to climate related issues. Moreover, Sacyr analyzes climate-related risks and opportunities in the study of new acquisitions and divestments, influencing capital allocations and capital expenditures. Indeed, physical climate risks have a clear potential impact on Sacyr's type of assets, so climate-related issues are always considered both for existing and potential ones. A company-wide Integrated Risk Management System (IRMS) is implemented in big projects -considering its size and its financial amount-, and it defines the identification into threat or opportunity, responsible actor for its evaluation, evaluation result (probability, impact and level of priority), economic estimation of the impact both before and after mitigation, as well as planning (including financial planning) of the actions associated with its is mitigation. As an example, in the Sacyr Concessions project for the Tahuac hospital in Mexico City, a high risk of extreme seismic events was detected, so energy dissipaters were installed in the infrastructure as a preventive measure (87.97M€ of investment). This risk was actually materialized eventually, and the preventive measure taken allowed a significant economic asving. Regarding direct costs, climate change consequences such as increase in temperatures or extreme weather events, as well as emerging regulation such as severing energy consumption, influence Sacyr's operating costs due to delays and repairs of damages caused. However, the company has insurance policies that cov

C3.1f

(C3.1f) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year? Absolute target

C4.1a

CDP

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number Abs 1

Year target was set 2016

Target coverage Company-wide

Scope(s) (or Scope 3 category) Scope 1+2 (location-based)

Base year

2015

Covered emissions in base year (metric tons CO2e) 773549 58

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

Target year 2020

100

Targeted reduction from base year (%)

1.1

Covered emissions in target year (metric tons CO2e) [auto-calculated] 765040 53462

Covered emissions in reporting year (metric tons CO2e) 504360.01

% of target achieved [auto-calculated] 3163.569566014

Target status in reporting year Achieved

Is this a science-based target? No, but we anticipate setting one in the next 2 years

Please explain (including target coverage)

This target was set as part of our Carbon Footprint 2016-2020 plant. Now that we have not only achieve it by reducing electricity and fuel consumption, but also exceed it, we are working in order to set a new and more ambitious one. Sacyr has joined the Business Ambition for 1.5°C, whereby it undertakes to define and validate sciencebased targets in the short-term. Through this initiative we aim to be aligned with the objective of the United Nations to limit to 1.5°C the increase of global temperature at age-old levels pre-industrial. These science-based targets will be aimed at reducing the carbon footprint corresponding to the different operations developed by the Group. Among the many benefits that they entail are: • to deepen carbon management; • boosting innovation; • anticipating legal requirements; • strengthening investor confidence; • improving profitability and competitive positioning.

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year? Other climate-related target(s)

C4.2b

(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.

Target reference number Oth 1		
Year target was set 2019		
Target coverage Site/facility		
Target type: absolute or intensity Absolute		
Target type: category & Metric (target numerator if reporting an intensity target)		
Fossil fuel reduction target	Other, please specify (Liters of gasoil)	
Target denominator (intensity targets only)		

٩p

Base year

Figure or percentage in base year 59557

Target year 2019

Figure or percentage in target year 57557

Figure or percentage in reporting year 56404

% of target achieved [auto-calculated] 157.65

Target status in reporting year Achieved

Is this target part of an emissions target?

Yes, great performance against this target contributes to Scope 1 emissions reductions, therefore, to our global Scope 1 and 2 target.

Is this target part of an overarching initiative? No, it's not part of an overarching initiative

Please explain (including target coverage)

Sacyr sets individual targets for each site/facility considering the specific activity and elements of the operations. Targets are established on a yearly basis taking into account data from the previous year. The individual progress towards each specific target is calculated by the Quality, Environment and Energy Department.

Target reference number Oth 2

Year target was set 2019

Target coverage Site/facility

Target type: absolute or intensity Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Fossil fuel reduction target

Other, please specify (Liters of gasoline)

Target denominator (intensity targets only) <Not Applicable>

Base year

2018

Figure or percentage in base year 1291.2

Target year

2019

Figure or percentage in target year 1226.64

Figure or percentage in reporting year 1220

% of target achieved [auto-calculated] 110.285006195787

Target status in reporting year Achieved

Is this target part of an emissions target?

Yes, great performance against this target contributes to Scope 1 emissions reductions, therefore, to our global Scope 1 and 2 target.

Is this target part of an overarching initiative? No, it's not part of an overarching initiative

Please explain (including target coverage)

Sacyr sets individual targets for each site/facility considering the specific activity and elements of the operations. Targets are established on a yearly basis taking into account data from the previous year. The individual progress towards each specific target is calculated by the Quality, Environment and Energy Department.

Target reference number Oth 3

Year target was set 2019

Target coverage Site/facility

Target type: absolute or intensity

Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Other, please specify (kW of electricity)

Target denominator (intensity targets only) <Not Applicable>

Base year 2017

Figure or percentage in base year 24785

Target year 2019

Figure or percentage in target year 24537.15

Figure or percentage in reporting year 16688.93

% of target achieved [auto-calculated] 3266.52007262459

Target status in reporting year Achieved

Is this target part of an emissions target? Yes, great performance against this target contributes to Scope 2 emissions reductions, therefore, to our global Scope 1 and 2 target.

Is this target part of an overarching initiative? No, it's not part of an overarching initiative

Please explain (including target coverage)

Sacyr sets individual targets for each site/facility considering the specific activity and elements of the operations. Targets are established on a yearly basis taking into account data from the previous year. The individual progress towards each specific target is calculated by the Quality, Environment and Energy Department.

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	7	322
Implementation commenced*	0	0
Implemented*	2	71126
Not to be implemented	0	0

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Transportation

Company fleet vehicle replacement

Estimated annual CO2e savings (metric tonnes CO2e)

45

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4) 4569

Investment required (unit currency – as specified in C0.4) 1333588

Payback period

>25 years

Estimated lifetime of the initiative

6-10 years

Comment

The initiative consists in the progressively substitution of fuel vehicles from our Valoriza Medioambiente unit fleet by the electric vehicles This substitution takes place through a project that carries out four activities in four different areas of Spain: Albacete (17 vehicles), Ibiza (6 vehicles), Vilanova (5 vehicles) and Alcala (20 vehicles). The first three started in 2016, while the one in Alcalá started in 2018.

Initiative category & Initiative type

Fugitive emissions reductions

Oil/natural gas methane leak capture/prevention

Estimated annual CO2e savings (metric tonnes CO2e) 71081

. 1001

Scope(s) Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4) 376897

Investment required (unit currency – as specified in C0.4) 1031800

Payback period

1-3 years

Estimated lifetime of the initiative 16-20 years

Comment

This initiative consists on the extraction, treatment and recovery of the biogas generated in the Miramundo landfill, in Medina Sidonia (Cádiz), specifically in its cells 1 and 2, still in operation, for its torch and motor burning 1333588,22. The activity started in 2016. The Activity would last until both cells are completely degassed. The methane emission capacity based on the anaerobic decomposition of the matter lasts up to 30 years after the waste disposal, although from the tenth year the intensity decreases considerably.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Dedicated budget for energy efficiency	One of the core pillars of Sacyr's "2016-2020 Carbon footprint plan" is to promote energy savings and to adopt energy efficiency measures. In this sense, Sacyr has invested in electric vehicles promoting its use in its Services' contracts.
Dedicated budget for low-carbon product R&D	Sacyr has developed several low-carbon products and services through R&D initiatives. Some examples are the use of LED lights in tunnels, and the fabrication of RARx (an additive for bituminous mixtures manufactured from used tires' powder).
Partnering with governments on technology development	As an example, Sacyr participates in the LIFE TRANSFOMEM project, which is co-financed by the EU, along with local governments and entities. This project aims to increase the sustainability of membrane-based water treatment processes, by improving their durability and reducing the environmental costs associated to this technology. This is achieved through an environmentally friendly recycling process of waste membranes disposed by reverse osmosis desalination plants, and the use of recycled membranes in lower pressure filtration processes. This process reduces the number of membranes that end up in landfills, thus reducing GHG emissions.
Compliance with regulatory requirements/standards	Sacyr fulfills regulatory requirements such as the EU Emissions Trading System, and GHG emissions requirements on public tenders, as well as voluntary standards like ISO 50.001, ISO 14.001, MITECO's "Climate Projects" that aim to reduce GHG emissions on diffuse sectors in Spain
Employee engagement	Sacyr carries out several campaigns to engage its employees in sustainable practices and emission reduction activities. An example of this is Sacyr Circular, where employees pitched R&D ideas on circular accommunicate which reduced the company's GHG emissions

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions? Yes

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.

Level of aggregation

Group of products

Description of product/Group of products

Sacyr offers third parties to reduce their emissions through its business unit Concessions, where it offers sustainable management options for roads, buildings etc. In this sense, in 2019 we have continue developing a project where sodium vapor lights were replaced by LED lights (IOHNIC system) in tunnels and stations. These products allow third parties to avoid GHG emissions in their Scope 2, due to the fact that LED lights consume less electricity. Due to Sacyr's high business volume, this project merely entails a small fraction of the company's entire turnover.

Are these low-carbon product(s) or do they enable avoided emissions?

Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions Other, please specify (Internal methodology)

% revenue from low carbon product(s) in the reporting year

0

% of total portfolio value

<Not Applicable>

Asset classes/ product types <Not Applicable>

Comment

Example of its avoided emissions performance: A standard, bi-directional (2-tube) highway tunnel, with a total length of approximately 2 km and illuminated by conventional solutions based on sodium vapour, would have an annual consumption of approximately 680,000 kWh/year, which represents annual CO2 emissions of around 262 tons. With the implementation of the IOHNIC system, the consumption of this same type of tunnel would be in the region of 283,000 kWh/year, representing therefore emissions of 109 tons of CO2 per year. This represents a reduction of 153 tons of CO2 per year, or 60%. It should be noticed that, even though Sacyr is driving efforts towards this kind of products, due to the high volume of commercialization and turnover of the company as a global, the revenue obtained from them is diluted and represents less than a 1% for the moment.

Level of aggregation

Product

Description of product/Group of products

Civil works are a great generator of emissions. In this project, an innovative product has been developed worldwide, the RARx. Tyre powder has demonstrated for years its capacity to modify asphalt mixtures, but the difficulty in existing consumption systems had put an end to its use. We have developed an additive, RARx, which breaks all barriers to consumption, generating a technical product with more than 60% of tyre dust in its composition, which allows its use in any work site in the world and under any circumstance. This additive allows to make asphalts with a technical performance far above the conventional ones, which allows to reduce the need of thickness in the asphalt layers in more than 50%. In fact, SACYR has already used it in Mexico, on the Pirámides to Tulancingo highway. ADAP studies have evaluated different construction systems made with conventional asphalt mixes and with RARx asphalt mixes, with reductions of 45% in emissions. The additive would make it possible to recycle 100% of the used tires in each country and introduce them into the road.

Are these low-carbon product(s) or do they enable avoided emissions?

Low-carbon product and avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions Other, please specify (Internal methodology)

% revenue from low carbon product(s) in the reporting year

0.01

% of total portfolio value <Not Applicable>

Asset classes/ product types

<Not Applicable>

Comment

The RARx project has not only generated a new business model in the Sacyr Group, with the creation of the subsidiary CIRTEC, but it is also a project that has generated transversal benefits for the Group. It has enabled a new, much more efficient and durable construction system for SACYR's motorway concessions. In 2016 only 573 tons of tyre dust were used for road construction. This increased to a consumption of 2,791 tons in 2018 thanks to the appearance of the RARx on the market. It should be noticed that, even though Sacyr is driving efforts towards this kind of products, due to the high volume of commercialization and turnover of the company as a global, the revenue obtained from them is diluted and represents less than a 1% for the moment.

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start January 1 2015

Base year end December 31 2015

Base year emissions (metric tons CO2e) 712752.7

Comment

Scope 2 (location-based)

Base year start January 1 2015

Base year end

December 31 2015

Base year emissions (metric tons CO2e) 60796.88

Comment

Scope 2 for the base year was calculated using a location-based approach. By the time our target was set we were unable to access accurate market information so we can't offer a market-base baseline year figure. However, we are working on being able to report both approaches for all our geographies.

Scope 2 (market-based)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions. The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition) Other, please specify (Sacyr's carbon footprint calculation procedure according to ISAE3410)

C5.2a

(C5.2a) Provide details of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

Sacyr has developed its own internal document explaining the procedure to calculate its carbon footprint based on The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard. This document establishes responsibilities within the Group, definitions and methodology aiming to standardize and register within the company the information gathering and the calculations needed. According to the methodology, all business areas involved in the carbon footprint calculation must register their fuel consumption and electricity data in an application designed by Sacyr's Quality department. However, there are some exceptions to this rule where certain units register their data on an excel spreadsheet and business trips are registered by travel agencies.

Once the data is collected, Sacyr calculates its GHG emissions on an excel spreadsheet where each emissions category is allocated on a different tab.

Scope 1 emissions take into account fuel consumption in stationary and mobile sources, as well as refrigerant gases used during the reporting year.

Scope 2 emissions consider electricity consumption on all facilities.

Scope 3 emissions encompass business trips, waste generated and raw materials purchase. Emissions factors are reviewed and updated periodically by Corporate General Management.

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e) 437435.22

Start date

<Not Applicable>

End date

<Not Applicable>

Comment

This figure accounts for Sacyr's emissions derived from fuel consumption associated with owned fleet and machinery, fuel consumption in stationary equipment, and leakage of refrigerant gases on existing air conditioning equipment in our facilities.

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

Scope 2 emissions consider Sacyr's consumption of electricity, accounting both renewable and conventional.

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based 66924.79

Scope 2, market-based (if applicable) 49184.59

Start date

<Not Applicable>

End date <Not Applicable>

Comment

Scope 2 figures take into account Sacyr's emissions from the electric power consumption in our facilities

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Evaluation status

Relevant, calculated

Metric tonnes CO2e 393834 95

Emissions calculation methodology

Due to the nature of Sacyr's different business units, there is an important volume of goods and services purchased yearly. For this reason, this category is considered as relevant. However, because of the extensive volume of Sacyr's business, it is difficult to compile the total database for the calculation. We are only accounting for raw materials and water so far. The company expects to be able to extend the coverage of this category in the following years. To calculate the emissions of water, we took the total amount of m3 of purchased water and use the emission factor of supply water (0.34kgCO2e/m3). In the case of raw materials we considered paper, steel, asphalts, lubricants, soil, concrete, sand and gravel. We took total amount in tons and use emission factors from life cycle analysis of each of the materials considered so to get kgCO2e.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Capital goods

Evaluation status

Relevant, not yet calculated

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Although we are aware this category may imply a great amount of emissions within our total, we are still on our first steps of Scope 3 calculations and its complexity due to being a highly fluctuating category has been a barrier for this year. However, we expect to be able to access the required information and get a figure in the years to come.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status Relevant, not yet calculated

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

We are aware this category is relevant as its results strictly depends on Scope 1 and 2. Well-to-tank emissions from fuel consumption, and transmission and distribution losses from electricity fall under this category. However, we are still on our first steps of Scope 3 calculations and we expect to be able to provide a figure in the years to come.

Upstream transportation and distribution

Evaluation status

Relevant, not yet calculated

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Due to the nature and location of Sacyr's different business contracts, upstream transportation and distribution emissions are considered relevant. However, because of the extensive volume of Sacyr's business, it is difficult to compile the necessary information for its inclusion in the carbon footprint calculation. We expect to be able to access the required information and get a figure in the years to come.

Evaluation status

Relevant, calculated

Metric tonnes CO2e 819637 27

Emissions calculation methodology

Due Sacyr's different business activities, the waste generated in operations is considered relevant. Waste is classified by business activity, type of waste and treatment, therefore based on the quantity (kg) of each waste we can map it to a specific emission factor that fits both the type of dispose and the final treatment applied to it.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Please explain

100

Business travel

Evaluation status Relevant, calculated

Metric tonnes CO2e 5952.53

Emissions calculation methodology

This category encompasses the emissions associated to the transportation of employees for business-related activities by plane and/or train. The activity data is compiled through Sacyr's travel agencies considering distance travelled. To calculate the CO2e emissions, the activity data is multiplied by its corresponding emission factors. The emissions factors used for the calculations derive from DEFRA (Department for Business, Energy & Industrial Strategy), "UK Government GHG Conversion Factors for Company Reporting" for flights, and "Guía práctica para el cálculo de emisiones de gases efecto invernadero" of the Catalan Climate Change Office for trains.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Employee commuting

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e <Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Based on estimations conducted in previous years, Sacyr's GHG emissions associated to its employee commuting are not considered relevant when evaluated along with the rest of the categories (less than 5% of total emissions). However, we expect to be able to access the required information and get in any case a figure in the years to come.

Upstream leased assets

Evaluation status

Relevant, not yet calculated

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Although we are aware this category is relevant as some of our assets and buildings fall under a renting scheme, we haven't been able to calculate it yet. However, we expect to be able to access the required information and get a figure in the years to come.

Downstream transportation and distribution

Evaluation status Relevant, not yet calculated

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners <Not Applicable>

Please explain

Although we are aware this category may imply a great amount of emissions within our total, we are still on our first steps of Scope 3 calculations and its complexity (due to the great amount of products transported by different actors in the value chain) has been a barrier for this year. However, we expect to be able to access the required information and get a figure in the years to come.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e <Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Sacyr's activity does not generate products that can be further processed, so we consider this category as not relevant for our company.

Use of sold products

Evaluation status Relevant, not yet calculated

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Although we are aware this category may imply a very significant amount of emissions within our total, we are still on our first steps of Scope 3 calculations and its complexity taking into account the diversity of activities we carry out has been a barrier for this year. However, we expect to be able to access the required information and get a figure in the years to come.

End of life treatment of sold products

Evaluation status

Relevant, not yet calculated

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Although we are aware this category may imply a very significant amount of emissions within our total, we are still on our first steps of Scope 3 calculations and its complexity taking into account the diversity of activities we carry out has been a barrier for this year. However, we expect to be able to access the required information and get a figure in the years to come.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Sacyr does not own any asset leased to third parties, therefore we do not consider this category as a relevant one for us.

Franchises

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

The business model of Sacyr do not include franchises, therefore we do not consider this category as a relevant one for us.

Investments

Evaluation status Relevant, not yet calculated

Metric tonnes CO2e <Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Sacyr owns shares in several companies in which it participates but does not have operational control. We are aware this category may imply a significant amount of emissions within our total. However, we are still on our first steps of Scope 3 calculations and its complexity taking into account the amount and diversity of invested companies has been a barrier for this year. However, we expect to be able to access the required information and get a figure in the years to come.

Other (upstream)

Evaluation status

Metric tonnes CO2e <Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners <Not Applicable>

Please explain

Other (downstream)

Evaluation status

Metric tonnes CO2e <Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners <Not Applicable>

Please explain

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization? $\ensuremath{\mathsf{No}}$

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure 0.00011671

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e) 486619.8

Metric denominator unit total revenue

Metric denominator: Unit total 4169467

Scope 2 figure used Market-based

% change from previous year 16.16

Direction of change Decreased

Reason for change

Sacyr has been working towards the achievement of its GHG reduction target. Our intensity figure has decreased, which is extremely positive given the increase in activity of the company. A raft of measures were taken in 2019, among which is worth mentioning the energy saving and efficiency measures such as the replacement of equipment and facilities with more efficient systems, optimization analysis of maintenance processes for equipment involving significant energy use (e.g., replacement of conventional lighting with LEDs, power generation using renewable sources (solar generation) instead of fossil fuels, and preventive maintenance of equipment with a high impact on energy consumption).

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type? No

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/region.

Country/Region	Scope 1 emissions (metric tons CO2e)
Angola	1065.53
Australia	13.93
Cabo Verde	16.34
Chile	6317.28
Colombia	15118.32
Ecuador	14.87
Spain	388871.94
United States of America	9498.04
Gibraltar	90.82
Ireland	0
Mexico	3697.82
Mozambique	588.14
Paraguay	1888.11
Peru	4747.31
Portugal	1685.07
Qatar	2951.99
United Kingdom of Great Britain and Northern Ireland	29.59
Uruguay	840.1
Oman	0

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide. By business division (C7.3a) Break down your total gross global Scope 1 emissions by business division.

Business division	Scope 1 emissions (metric ton CO2e)
Engineering and infrastructures	44829.25
Concessions	3276.48
Industrial	356302.9
Services	33026.59

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted for in Scope 2 market-based approach (MWh)
Angola	0	0	0	0
Australia	1052.53	1052.53	1394.08	0
Cabo Verde	19.67	19.67	43.13	0
Chile	3900.98	3900.98	8906.36	0
Colombia	387.38	387.38	3521.63	0
Ecuador	0	0	0	0
Spain	49913.45	32160.29	121740.12	15621.33
United States of America	3.6	3.6	7.89	0
Gibraltar	73.92	73.92	97.01	0
Ireland	9.66	9.66	23.12	0
Mexico	154.09	154.09	292.4	0
Mozambique	1.46	1.46	22.4	0
Paraguay	0	0	0	0
Peru	246.17	246.17	1008.91	0
Portugal	93.51	106.46	270.26	0
Qatar	4.69	4.69	9.66	0
United Kingdom of Great Britain and Northern Ireland	164.3	164.3	642.81	0
Uruguay	0	0	0	0
Oman	10899.38	10899.38	21413.32	0

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide. By business division

C7.6a

(C7.6a) Break down your total gross global Scope 2 emissions by business division.

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Engineering and infrstructures	2508.6	2058.36
Services	53359.02	39012.66
Industrial	4621.17	2616.51
Concessions	6436.01	5497.05

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year? Decreased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	2494.45	Decreased	0.47	Sacyr consumes a renewable fuel: biomass, in the generation of electrical energy, representing 21.56% (22% in 2018) of the total their internal energy consumption. This electricity is generated through a biofuel whose origin is certified sustainability, thus entails a dual commitment to sustainable development, both towards circular economy as well as the fight against change climate. In MWh terms, Sacyr's renewable energy purchased has increased in Spain. Total increased: 15,621.33MWh - 5270.91MWh = 10,350.42 MWh. Considering that the average emission factor for electricity in Spain is 0.241 tCO2/MWh Total savings: 10,350.42*0.241= 2,494.45 tCO2 Emission value %= 2,494.45/528,369.78*100=0.47.
Other emissions reduction activities	4807.22	Decreased	0.91	Decrease due to emission reduction activities includes: i) Reduction of electricity consumption in our facilities and constructions through different reduction initiatives and activities such as: - Replacement of conventional lighting system with LED technology; - installation of autonomous lighting control; - readjustment of air conditioning start and stop times; - progressive replacement of leque equipment; - installation of presence detectors; - installation of presence detectors; - installation of presence detectors; - installation of start and stop times; and the beginning of 2019 the maximum contribution of low-level steam was put into service. This steam was previously emitted to the atmosphere in another facility within plant and from that moment onwards it is redirected to the Biomass boiler reducing the consumption of natural gas. iii) Reduction of gasoil consumption in our operations through different activities such as: - Aurora project extension in 2019: Autonomous mobile renewable energy generation unit (solar generation) with reduction in the use of diesel in the generation of electricity for the park Fleet optimization initiatives and replacement by greener options. Reductions from i), ii) and iii) were 5,326.42 GJ, 74,635.19 GJ and 825.44 GJ respectively, therefore 54.37+4,208.59+57.25=4.807,22 tCO2e. This has led to a change in emissions of 0.91% against 2018 figure. Emission value %= 4.807,22/528,369.78*100=0.91%
Divestment	34448.3	Decreased	6.52	Although Sacyr's turnover has increased by 9.8%, Scope 1 and 2 direct emissions have dropped by 9.2% with respect to the previous year, a substantial feat considering the surge in activity. A wide range of emission reduction initiatives and activities are being carried out by the company in order to work towards our commitment with climate change fight as stated in previous rows. Nevertheless, it also has to be taken into account that Sacyr Industrial divested in several plants in 2019, resulting in fewer emissions sources and less absolute emissions for this business area against 2018 figure. In particular, Sacyr Industrial no longer operates 5 cogeneration plants, 2 biomass facilities and 2 olive residue oil treatment plants. 34,448.30 correspond to the amount of emission value %= 34,448.30/528,369.78*100=6.52%
Acquisitions		<not Applicable ></not 		
Mergers		<not Applicable ></not 		
Change in output		<not Applicable ></not 		
Change in methodology		<not Applicable ></not 		
Change in boundary		<not Applicable ></not 		
Change in physical operating conditions		<not Applicable ></not 		
Unidentified		<not Applicable ></not 		
Other		<not Applicable ></not 		

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy? More than 0% but less than or equal to 5%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	810079.64	2080114.35	2890193.99
Consumption of purchased or acquired electricity	<not applicable=""></not>	15621.33	143771.75	159393.08
Consumption of purchased or acquired heat	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Consumption of purchased or acquired steam	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Consumption of purchased or acquired cooling	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Consumption of self-generated non-fuel renewable energy	<not applicable=""></not>	0	<not applicable=""></not>	0
Total energy consumption	<not applicable=""></not>	825700.97	2223886.1	3049587.07

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	Yes
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	Yes

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Fuels (excluding feedstocks) Biodiesel
Heating value LHV (lower heating value)
Total fuel MWh consumed by the organization 152674.37
MWh fuel consumed for self-generation of electricity 0
MWh fuel consumed for self-generation of heat 0
MWh fuel consumed for self-generation of steam 0
MWh fuel consumed for self-generation of cooling <not applicable=""></not>
MWh fuel consumed for self-cogeneration or self-trigeneration 0
Emission factor 0
Unit kg CO2 per liter
Emissions factor source OECC
Comment The biodiesel consumed by Sacyr during 2019 was considered to be 100% renewable.

Fuels (excluding feedstocks)

Compressed Natural Gas (CNG)

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization 7726.34

MWh fuel consumed for self-generation of electricity 0

MWh fuel consumed for self-generation of heat 0

MWh fuel consumed for self-generation of steam 0

MWh fuel consumed for self-generation of cooling <Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration 0

Emission factor 0 0002

Unit kg CO2 per MWh

Emissions factor source OECC

Comment

Fuels (excluding feedstocks) Liquefied Petroleum Gas (LPG)

Heating value LHV (lower heating value)

Total fuel MWh consumed by the organization 6613.93

MWh fuel consumed for self-generation of electricity 0

MWh fuel consumed for self-generation of heat 0

MWh fuel consumed for self-generation of steam 0

MWh fuel consumed for self-generation of cooling <Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration 0

Emission factor 1.671

Unit kg CO2 per liter

Emissions factor source OECC

Comment

0

0

0

Fuels (excluding feedstocks) Motor Gasoline Heating value LHV (lower heating value) Total fuel MWh consumed by the organization 13902.99 MWh fuel consumed for self-generation of electricity MWh fuel consumed for self-generation of heat MWh fuel consumed for self-generation of steam MWh fuel consumed for self-generation of cooling <Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration 0

Emission factor 2.157

Unit kg CO2 per liter

Emissions factor source OECC

Comment

Fuels (excluding feedstocks) Propane Gas

Heating value LHV (lower heating value)

Total fuel MWh consumed by the organization 792.52

MWh fuel consumed for self-generation of electricity 0

MWh fuel consumed for self-generation of heat 0

MWh fuel consumed for self-generation of steam 0

MWh fuel consumed for self-generation of cooling <Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration 0

Emission factor 0.00293

Unit kg CO2 per metric ton

Emissions factor source OECC

Comment

Fuels (excluding feedstocks) Residual Fuel Oil

Heating value LHV (lower heating value)

Total fuel MWh consumed by the organization 13368.98

MWh fuel consumed for self-generation of electricity 0

MWh fuel consumed for self-generation of heat 0

MWh fuel consumed for self-generation of steam 0

MWh fuel consumed for self-generation of cooling <Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration 0

Emission factor 0.00312

Unit kg CO2 per metric ton

Emissions factor source OECC

Comment

Fuels (excluding feedstocks) Natural Gas

Heating value LHV (lower heating value) Total fuel MWh consumed by the organization 1753678.89

MWh fuel consumed for self-generation of electricity 1192501.65

MWh fuel consumed for self-generation of heat

543640.46

MWh fuel consumed for self-generation of steam 0

MWh fuel consumed for self-generation of cooling <Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration 561177.25

Emission factor

0.00029

Unit kg CO2 per MWh

Emissions factor source OECC

Comment

Natural Gas consumed for self-cogeneration can be disgregated into 543,640.46MWh of heat and 17,536.79MWh of steam (according to guidance not to be accounted in column MWh consumed for self-generation of steam).

Fuels (excluding feedstocks)

Biomass Municipal Waste

Heating value

LHV (lower heating value) Total fuel MWh consumed by the organization

657405.27

MWh fuel consumed for self-generation of electricity 657405.27

MWh fuel consumed for self-generation of heat 0

MWh fuel consumed for self-generation of steam 0

MWh fuel consumed for self-generation of cooling <Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

Emission factor

0

0

Unit kg CO2 per metric ton

Emissions factor source OECC

Comment

Fuels (excluding feedstocks) Diesel

Heating value LHV (lower heating value)

Total fuel MWh consumed by the organization 214524.11

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam 0

MWh fuel consumed for self-generation of cooling <Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration 0

Emission factor

2.493

Unit kg CO2 per liter

Emissions factor source OECC

Comment

Fuels (excluding feedstocks)

Other, please specify (Gas Oil (agriculture and fishery))

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization 67810.66

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam 0

MWh fuel consumed for self-generation of cooling <Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

0

Emission factor

2.868

Unit kg CO2 per liter

Emissions factor source OECC

Comment

Sacyr has used 2 different types of gasoil (reported in the previous question), which have two different emissions factors: 2.868 kg CO2 per liter (Gasoil C) and 2.493kg CO2 per liter (Gasoil B).

Fuels (excluding feedstocks)

Other, please specify (Gas Oil (heating))

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization 1569.39

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam 0

MWh fuel consumed for self-generation of cooling <Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

0

Emission factor

2.493

Unit kg CO2 per liter

_

Emissions factor source OECC

Comment

Sacyr has used 2 different types of gasoil (reported in the previous question), which have two different emissions factors: 2.868 kg CO2 per liter (Gasoil C) and 2.493kg CO2 per liter (Gasoil B).

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	903085.44	40352.67	176584.14	12225
Heat	938725.59	413153.91	0	0
Steam	10225	10225	0	0
Cooling	0	0	0	0

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero emission factor in the market-based Scope 2 figure reported in C6.3.

Sourcing method

Unbundled energy attribute certificates, Guarantees of Origin

Low-carbon technology type

Other, please specify (Mix of energies with certificated renewable attributes)

Country/region of consumption of low-carbon electricity, heat, steam or cooling Spain

MWh consumed accounted for at a zero emission factor

825700.97

Comment

In 2019, 27.08% of Sacyr's total energy consumption came from renewable sources (26.56% from certified renewable biomass and 0.51% from a mix of other renewable energies we are unable to desegregate).

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place Annual process

Status in the current reporting year

Complete

Type of verification or assurance Limited assurance

Attach the statement

Verification_Appendix_INFORME INTEGRADO SACYR 2019 _ENG.pdf

Page/ section reference

The independent limited assurance report on GHG statement 2019 can be found attached. The whole document includes detail on the verification performed by a third party entity (PWC).

Relevant standard

ISAE 3410

Proportion of reported emissions verified (%)

100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach Scope 2 market-based

Verification or assurance cycle in place Annual process

Status in the current reporting year Complete

Type of verification or assurance Limited assurance

Attach the statement

Verification_Appendix_INFORME INTEGRADO SACYR 2019 _ENG.pdf

Page/ section reference

The independent limited assurance report on GHG statement 2019 can be found attached. The whole document includes detail on the verification performed by a third party entity (PWC).

Relevant standard ISAE 3410

Proportion of reported emissions verified (%)

100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category Scope 3: Purchased goods and services

Verification or assurance cycle in place Annual process

Status in the current reporting year Complete

Type of verification or assurance Limited assurance

Attach the statement

Verification_Appendix_INFORME INTEGRADO SACYR 2019 _ENG.pdf

Page/section reference

The independent limited assurance report on GHG statement 2019 can be found attached. The whole document includes detail on the verification performed by a thirdparty entity (PWC).

Relevant standard ISAE 3410

Proportion of reported emissions verified (%) 100

Scope 3 category Scope 3: Waste generated in operations

Verification or assurance cycle in place Annual process

Status in the current reporting year Complete

Type of verification or assurance Limited assurance

Attach the statement Verification_Appendix_INFORME INTEGRADO SACYR 2019 _ENG.pdf

Page/section reference

The independent limited assurance report on GHG statement 2019 can be found attached. The whole document includes detail on the verification performed by a thirdparty entity (PWC).

Relevant standard

ISAE 3410

Proportion of reported emissions verified (%)

100

Scope 3 category Scope 3: Business travel

Verification or assurance cycle in place Annual process

Status in the current reporting year Complete

Type of verification or assurance Limited assurance

Attach the statement

Verification_Appendix_INFORME INTEGRADO SACYR 2019 _ENG.pdf

Page/section reference

The independent limited assurance report on GHG statement 2019 can be found attached. The whole document includes detail on the verification performed by a thirdparty entity (PWC).

Relevant standard ISAE 3410

Proportion of reported emissions verified (%) 100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5? Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C6. Emissions data	Year on year emissions intensity figure	NIEA 3000	The financial figure which allows us to obtain Sacyr's emissions intensity ratio (comparable year on year) goes through a verification process and is published on Sacyr's Annual Report (pg 115), which is entirely verified by a third-party entity.

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)? Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations. EU ETS

C11.1b

(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.

EU ETS

% of Scope 1 emissions covered by the ETS 75

% of Scope 2 emissions covered by the ETS 1

Period start date January 1 2019

Period end date December 31 2019

Allowances allocated 143196

Allowances purchased

Verified Scope 1 emissions in metric tons CO2e 327523.44

Verified Scope 2 emissions in metric tons CO2e 648.22

Details of ownership Facilities we own and operate

Comment

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

Sacyr, in its industrial plants in Spain, is subject to the EU ETS trading system. The more activity there is in the covered natural gas cogeneration plants, the greater the generation of electricity and heat and, therefore, its associated GHG emissions. For this reason, room to reduce them in the short-term is limited without endangering the business. However, aware of the impact of these type of plants and taking into account our commitment to limit to 1.5°C the increase of global temperature at age-old levels pre-industrial, we are working to increase efficiency and measures are being taken in order to reduce emissions as much as possible. Indeed, a Corporate Climate Change strategy is being defined, aiming to be launched by the end of the year in order to frame and drive all our actions towards a low-carbon resilient company context. It will take into account all of Sacyr's business areas and activities in the definition of targets and action lines.

Among those actions, the natural gas consumption of a gas boiler that provided a steam service in an installation under the EU ETS has been progressively reduced. However, the GHG emissions allocated to this consumption entails merely 2% of the whole installation's emissions. Therefore, in the short term, prior to implementing new actions and plans as a result of the new strategy, Sacyr's approach to comply with the EU ETS is to buy emissions rights, aiming in any case to purchase the minimum amount possible. In this sense, in 2019, Sacyr purchased 233000 allowances within the frame of the EU ETS, against the 242887 required for 2018.

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period? Yes

C11.2a

(C11.2a) Provide details of the project-based carbon credits originated or purchased by your organization in the reporting period.

Credit origination or credit purchase Credit origination

Project type

Transport

Project identification

"Proyectos Clima" is an scheme that has been developed by MITECO, Government of Spain with the aim of reducing Greenhouse Gas (GHG) emissions. They are a financing instrument, promoted through the FES-CO2, whose objective is to redirect national economic activity towards low-carbon models, thus contributing to the Spanish targets for reducing GHG emissions in the diffuse sector. The reductions in emissions generated by projects located in the national territory, reported annually to the FES-CO2, are verified by accredited greenhouse gas verifiers in accordance with the applicable regulations. The projects receive a payment for each ton of CO2 equivalent (tCO2e) reduced and verified. Our "Proyecto Clima" consists in the replacement of fossil fuel vehicles, by hybrid or electric ones. It was carried out by the business unit Valoriza Medioambiente in the urban cleaning and waste collection activities of Albacete, Ibiza, Vilanova i la Geltrú and Alcalá de Henares (Spain). The project includes four action points in four different areas of the Spanish geograhy: Albacete (17 vehicles), Ibiza (6 vehicles), Vilanova (5 vehicles) and Alcalá (20 vehicles). The first three are active since 2016, while the one in Alcalá started in 2017. Emission savings are accounted on an annual basis.

Verified to which standard

Other, please specify (FES-CO2)

Number of credits (metric tonnes CO2e)

45

Number of credits (metric tonnes CO2e): Risk adjusted volume 45

Credits cancelled Not relevant

Purpose, e.g. compliance Voluntary Offsetting

C11.3

(C11.3) Does your organization use an internal price on carbon? No, but we anticipate doing so in the next two years

no, but we anticipate doing so in the next two year

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers

Yes, our customers

Yes, other partners in the value chain

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Other, please specify (Collect environmental performance information from suppliers on a regular basis and assess its progress against other companies and themselves)

% of suppliers by number

62

% total procurement spend (direct and indirect)

70

70

% of supplier-related Scope 3 emissions as reported in C6.5

0

Rationale for the coverage of your engagement

Suppliers have a direct effect on Sacyr's general environmental impact, especially in terms of GHG emissions. The company's environmental behavior is subject, to a certain extent, to its supplier's environmental performance while carrying out contracts. For this reason, Sacyr assesses and prioritizes within purchasing decisions those suppliers that represent a relative important turnover for the company, as well as those whose activities could potentially have a substantial impact on contracts and/or the environment. The amount of suppliers by number that perform critical activities and are therefore exposed to this assessment in which environmental (including climate) information is required and assessed totaled 2360 suppliers in 2019 (on a regular basis and/or at the end of their service). 62% of our suppliers fulfilled evaluation criteria, representing around our 70% in spend.

Impact of engagement, including measures of success

Sacyr has a "Purchasing and Subcontracting Procedure" that establishes the specifications to select suppliers. This procedure gathers the stipulations to evaluate suppliers taking into account different criteria that classify them as approved, conditioned or non-approved to be employed in contracts. Within these criteria, suppliers' carbon and water footprint measurements, Environmental Management System certifications, the use of returnable packaging, publication of biodiversity activities and membership of the UN Global Act are assessed. Suppliers are then approved to be considered, and their environmental engagement is taken into account in the awarding of contracts and pricing negotiations. Once a supplier is employed, at the end of the contract, a final evaluation is carried out to analyze the general compliance of the supplier. Suppliers must obtain 2 out of 3 points in environmental practices and environmental documental compliance, in order to be included in further processes. This approval process is reviewed every 3 years to assess suppliers' progress and changes in environmental performance. In this sense, Sacyr acts as a motor force to promote sustainable behavior within suppliers. The objective is for all of Sacyr's suppliers to have an Environmental Management System. An example of measures of success would be the award of a contract in Sevilla, where the key factor in choosing the supplier was its possession of an FSC Certificate.

Comment

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement Education/information sharing

Details of engagement

Share information about your products and relevant certification schemes (i.e. Energy STAR)

% of customers by number

100

0

% of customer - related Scope 3 emissions as reported in C6.5

Portfolio coverage (total or outstanding)

<Not Applicable>

Please explain the rationale for selecting this group of customers and scope of engagement

Sacyr's environmental performance (including climate-related issues) is published on its website and in different mainstream reports. The company includes also this information in tenders when relevant. For this reason, it is considered that all of Sacyr's customers are aware and engaged through information sharing.

Impact of engagement, including measures of success

There is a growing tendency to include climate-related issues in public tenders, as more information about it is being required for the decision process. Sacyr shares information on the company's environmental performance and management of climate-related issues specific to each contract, when these matters influence in the awarding decision. Our measure of success is receiving the awarding of projects where sustainability and climate-related behaviors played a role in the decision. The more the projects in which this is a deciding factor won, the more successful the engagement is. One example of a project awarded to Sacyr in the reporting year was a train track construction project in the South of Spain. In this project, the deciding factor in the final awarding of the contract was Sacyr's environmental and energetic performance as well as its additional proposals as stated by the client. By this means, sharing information with our potential clients reinforce our awareness about how important and strategic are climate-related issues as in the upcoming years our business growth may depend on our climate performance.

C12.1d

In terms of climate-related engagement strategy with other partners in the value chain, Sacyr considers them to be working groups, associations and industry initiatives.

In 2019, Sacyr was a member of the following initiatives which involve, among other matters, a commitment to the fight against climate change: UN Global Compact, Forética's Climate Change Cluster, Spanish Green Growth Group, Community #PorElClima, Pact for the Circular Economy, and MITECO's Carbon Footprint Registry.

Sacyr plays different roles within these workgroups, initiatives and associations. Prioritizing those thoroughly consistent with Sacyr's core principles or those that may entail positive impact and value creation for the company and its upstream and downstream activities, representatives of the company (selected depending on the technicism or diplomacy required) attend conferences, participate in meetings, report information on the company's performance on climate-related issues, participate in collaborative projects and give presentations on sustainability and climate-related topics.

As an example of one of the actions carried out by Sacyr regarding our climate-related engagement strategy with other partners of the value chain, in 2019, Sacyr participated in several activities as part of the Spanish Green Growth Group (GECV), association aiming to foster public-private collaboration and advance environmental challenges together, therefore of interest and total consistency with Sacyr's strategy and operations. Among the actions carried out to transmit to society and public administrations the potential of a low-carbon model of economic growth, it should be mentioned our active participation in a series of cycles of Circular Economy Dialogues with the participation of members of the GECV and representatives of Public Administrations (Ministry, Autonomous Regions, FEMP), and civil society organizations (consumers, unions, experts, environmental associations) covering 3 main topics: Regulatory framework for the development of the Circular Economy, Economic instruments for the transition to the Circular Economy and the role of consumers in the transition to the Circular Economy.

Regarding the 2030 Agenda, and as well as part of our partnership with the GECV, in 2019 the ODS and Agenda 2030 Working Group was formed focusing its work around "Measurement: Indicators for monitoring Agenda 2030". We took part in meetings with the High Commissioner for Agenda 2030, participated in the launch of a Manifesto and a video on the occasion of the celebration of the 4th Anniversary of the ODS with high media and institutional coverage, and even received an award at the Climate Leaders Awards (October 2019) being recognized as a leader company in this climate figh

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following? Direct engagement with policy makers Trade associations Funding research organizations

Other

C12.3a

(C12.3a) On what issues have you been engaging directly with policy makers?

Focus of	Corporate	Details of engagement	Proposed legislative solution
registation	position		
Other,	Support	Sacyr, through its active participation within CEOE and ASELIP has given response and proposed amendments to be	On June 2019, gathered under ASELIP, comments on the
please	with minor	considered to the public consultation of the upcoming new Climate Change and Energy Transition Law, which is	Climate Change and Energy Transition draft.were submitted to the
specify	exceptions	expected to come into force in the short-term. • CEOE represents and defends the interests of Spanish business. It	CEOE in order to be consolidated with comments from other
(Upcoming		integrates, on a voluntary basis, most companies and self-employed of any size and activity sector. CEOE is the main	business associations and forwarded to the Government.
new		interlocutor for companies in Spain before the Government, State bodies, trade unions, political parties and international	Comments and proposals to the text focused around: • The need
Climate		institutions. In Europe, CEOE is an active member of BUSINESSEUROPE, which brings together business associations	of a fair transition. • Alignment of targets to existing European
Change		from all over the continent CEOE is a member of the Secretariat of the Advisory Council on the Environment (CAMA)	ones for specific sectors. • A clearer governance framework. •
and		CEOE is a member of the State Council for Natural Heritage and Biodiversity. • The Association of Public Cleaning	Carrying out a cost-benefit analysis in social, economic and
Energy		Companies (ASELIP) is the national sectorial association that represents Urban Cleaning companies, meaning the	environmental terms of the various regulatory alternatives. • An
Transition		activities of Street Cleaning, Collection, Transport, Treatment and Disposal, etc., of Urban Solid Waste.	exemplary role for the national administration, with reduction
Law)			targets also being set.

C12.3b

(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership? Yes

C12.30

Trade association

SEOPAN, Association of Infrastructure Contractor and Concessionaires of Spain

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

SEOPAN aims to encourage and defend the private initiative, a market economy, free enterprise in the construction sector, infrastructure and water technology concessions, and to protect the common interests of its affiliates before public administrations, institutions, and society, in addition to representing them both in Spain and abroad. The association considers environmental matters, covering as well, as matters arise, climate-related issues.

How have you influenced, or are you attempting to influence their position?

Sacyr is a member of SEOPAN's board of directors, which is the Association's governing and representative body, in accordance with the provisions and directives of the General Assembly. SACYR is one of the few members that have a Climate Change strategy expected to be soon in place and a clear rationale and focus on this topic. With its board position, Sacyr aims to influence the association and its members in order to improve their performance on climate-related matters, bringing awareness to all of them.

Trade association

Spanish Green Growth Group: group that aims collaboration between companies and governments to create an efficient roadmap for a low-carbon economy

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

Akin to the European Green Growth Group, the Spanish Group was created at a national level representing a wide range of sectors in order to gather different perspectives aiming to set a bilateral ongoing conversation between the government and private companies. The main purpose is to collect inputs on how to fight against climate change, support EU decarbonization policies, and evolve the economy into a more sustainable one.

How have you influenced, or are you attempting to influence their position?

SACYR has been taking part since its joining in 2016 as an active interlocutor on the different activities and existing taskforces offering its perspective through debates such as the future Spanish Climate Change law, and other actions. As an example of an action carried out during 2019, SACYR presented a case study regarding one of its low-carbon products in order to be published by the association so to spread awareness of green economy initiatives. Other relevant activities carried out during the year were: - Participation in COP 25 - Circular Economy: dialogues between members of the GECV and representatives of Public Administrations (Ministry, Autonomous Regions, FEMP), and civil society organisations (consumers, unions, experts, environmental associations). With 3 main discussion topics: regulatory framework for the development of the Circular Economy, economic instruments for the transition to the Circular Economy, the role of consumers in the transition to the Circular Economy. - Agenda 2030 • In 2019, the ODS and Agenda 2030 Working Group is formed (Scope of work on Measurement: Indicators for monitoring Agenda 2030) • Meetings with the High Commissioner for Agenda 2030 • Launch of a Manifesto on the celebration of the 4th Anniversary of the ODS with high media and institutional coverage • Presentation of the Manifesto at REE on September 25th with institutional representation • Sacyr received an award at the Climate Leaders Awards (October 2019)

Trade association

Forética (Climate Change Cluster)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

Forética is Spain's sole representative on the WBCSD. This brings businesses together to serve as a meeting point for fostering leadership, knowledge, ideas exchange and climate change discussions. In order to be a member, an organization must have a climate change strategy pathway, regularly publish performance indicators, and appoint a long-standing intermediary at departmental management or executive level. Forética has a signed agreement with the Ecological Transition Ministry with the aim of collaborating in the area of knowledge generation, development and dissemination of good practices, participation in working groups and forums for the promotion of sustainability as a guiding principle of the actions of the General State Administration. In addition, within this Ministry, Forética collaborates actively with the Spanish Office of Climate Change and the Biodiversity Foundation, in different specific projects. Specifically, it is a strategic partner of the Spanish Business and Biodiversity Initiative.

How have you influenced, or are you attempting to influence their position?

SACYR is a member of the cluster and actively participates in meetings and activities towards enhancing climate action. By sharing experience and good practices, SACYR attempts to influence other companies in their climate maturity pathway. As an example, during 2019 we participate in a debate around transformation of business models towards a low carbon economy, in which also representation of the Ecological Transition Ministry took part.

C12.3d

(C12.3d) Do you publicly disclose a list of all research organizations that you fund? Yes

C12.3e

During 2019, Sacyr has continued to organize other engagement activities in regard of environmental and climate issues with employees, customers, and other stakeholders. For example, in the context of the COP25 Climate Summit, Sacyr participated in the green zone as a model of a company strongly committed to sustainability. Sacyr Chile and Valoriza Servicios Medioambientales participated in the meeting organized by the Ministry of Chile "Resilience in public works and water for climate change", in the blue zone. The event was attended by professionals specializing in innovation in ecological solutions for public infrastructure, at which Sacyr shared its experience with RARx, its additive with tire dust and its technical and environmental benefits. Specifically, Sacyr Agua took part in the forum on water circularity hosted by the Spanish Chamber of Commerce. The seminar emphasized nonconventional resources for mitigating the effects of climate change, such as desalination and reuse.

Alongside the actions celebrated in the official spaces of the COP25, at its central headquarters, Sacyr organized different symposiums regarding inhouse initiatives that contribute to the fight against climate change. Topics covered were: 1. Sacyr's climate change strategy: highlight the importance of Sacyr's carbon management milestones. 2. RARx, sustainability on the road: manufacturing solution made with a bituminous mix with pretreated rubber powder as an alternative to the classical solutions. 3. The transformation of waste into secondary raw materials or energy: presentation of projects arising from the synergy between Valoriza Medioambiente with Enagás and Repsol. 4. Circular Park, efficient and sustainable: different measures on the use of renewable energy sources and fleet management to lengthen their useful life carried out in the Circular Park. 5. Sacyr in urban services: procedures with a commitment to fight against climate change (transition to green fleet, efficient driving, climate projects, etc.) 6. Sustainable desalination: impacts of desalination, reduction of energy consumption and the presentation of sustainable experiences. 7. Environmental corporate volunteering: projects carried out in the regions in which the company has business.

Moreover, in 2019, we launched "EcoMunicate", a new internal communication channel designed to detect, manage and circulate the concerns of all employees regarding the Organisation's environmental management. A mailbox for each country's "home market".

We also promote community initiatives to foster sustainable urban mobility. Within the framework of the Parks and Gardens Maintenance Service contract for the northern sector of the city of Seville, Valoriza Medioambiente, in partnership with the Parks and Gardens Department of the City Council, hosted a conference in the Parque Rojo on Sustainable Mobility aimed at pupils at a nursery and primary school located in the Northern District, in order to raise awareness, propose sustainable transport alternatives, publicize Seville's extensive network of cycle lanes, and promote among young people respect for public spaces.

Sacyr also joined on 5 June to the celebration of World Environment Day, devoted to the fight against atmospheric pollution. To commemorate that day, we organized different acts in Mexico, Chile, Portugal, Peru, Colombia and Spain. The objective is to commit the whole organization to the fight against climate change and to raise awareness regarding the importance of also adopting sustainable habits in our day-today lives. In Spain, a symposium took place explaining the initiatives being implemented by Sacyr in different areas to reduce CO2 emissions in the atmosphere. Sacyr's president ended the act with a speech that highlighted the commitment of our company in environmental matters.

C12.3f

(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

The company ensures at all times, based on its environmental policy, that all of its direct activities are consistent with its overall climate change approach, reducing risks and impacts, as well as fostering opportunities. Sacyr is indeed currently defining its Corporate Climate Change Strategy that will take into account all of Sacyr's business areas and activities in the definition of targets and action lines.

In order to ensure that all of our activities that influence policy are consistent with our strategy towards climate related issues, three committees are in place with responsibilities to review, accept or prevent actions depending on their consistency with our values and vision. As new activities will require the acceptance of at least one of this committees, we consider they entail a method to prove that activities are aligned with the core principles of our strategy.

1. The Sustainability and Corporate Governance Committee is mainly responsible for supervising and proposing corporate environmental, social and good governance policies, known by the acronym ESG (Environmental, Social and Governance). The committee is made up of a majority of independent directors of different business units.

2. The Sustainability Committee is in charge of developing and executing the actions related to sustainability within a strategy aligned with the ODS (Sustainable Development Goals). This committee is chaired by the group's president and CEO, and is made up of the general corporate management, the general management of talent management and human resources, the general management of communication and sustainability, the business legal department, the secretary of the board of directors, and the heads of other business areas.

3. The Management System Committee, also known as the Quality, Environment and Energy Committee, with the following functions: prepare a study and analysis of the context and stakeholders, analyse the System Review Report, carry out the final consolidation of risks and opportunities.

In terms of indirect activities, as stated in 12.1d, Sacyr is member of associations that are consistent with its core principles. For example, within its trade association, Sacyr influences climate policy through its board position, working to achieve a higher commitment and performance within its members; and by funding research organizations such as CTA (Technological Corporation of Andalucía), the company provides an economic fund that allows for RDI in technology, supporting efficiency.

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication

In mainstream reports

Status Complete

Attach the document

INFORME INTEGRADO SACYR 2019 _ENG_tcm30-45681.pdf

Page/Section reference

Chapter 5 includes Sacyr's stance on environmental values and matters, as well as the actions carried out during 2019. Pages 102-119 are specific to Sacyr's commitment to the fight against climate change.

Content elements

Strategy Emissions figures Other metrics

Comment

 $Sacyr's \ Integrated \ Report \ is \ publicly \ available \ at \ http://www.sacyr.com/es_en/images/INFORME\%20INTEGRADO\%20SACYR\%202019\%20_ENG_tcm30-45764.pdf$

C15. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C15.1

(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	COO of Sacyr, General Corporate Manager	Chief Operating Officer (COO)

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	416900000

SC0.2

(SC0.2) Do you have an ISIN for your company that you would be willing to share with CDP? No

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

Requesting member

Cellnex Telecom SA

Scope of emissions Scope 1

Allocation level

Facility

Allocation level detail

Two small maintenance and cleaning contracts for the offices in C/ Juan Esplandiú (Madrid).

Emissions in metric tonnes of CO2e

0

Uncertainty (±%)

0

Major sources of emissions

Verified Yes

Allocation method

Allocation not necessary due to type of primary data available

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Considering the type of services provided to Cellnex Telecom as well as the conditions defined in the contracts, Sacyr does not have any direct consumption associated with the development of the activities.

Requesting member

Cellnex Telecom SA

Scope of emissions Scope 2

Scope 2

Allocation level Facility

Allocation level detail

Two small maintenance and cleaning contracts for the offices in C/ Juan Esplandiú (Madrid).

Emissions in metric tonnes of CO2e

0

Uncertainty (±%)

0

Major sources of emissions

Verified

Yes

Allocation method

Allocation not necessary due to type of primary data available

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Considering the type of services provided to Cellnex Telecom as well as the conditions defined in the contracts, Sacyr does not have any direct consumption associated with the development of these activities.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

Since Sacyr's carbon footprint (scope 1 and scope 2) associated with the services provided to Cellnex Telecom is 0, it is unnecessary to provide references for the data used.

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges	
Customer base is too large and diverse to accurately track emissions to the	Deepening in the knowledge of our diverse processes and having a better understanding of our scope 3 are crucial to allocate our	
customer level	emissions to our customers.	

SC1.4a

(SC1.4a) Describe how you plan to develop your capabilities.

The plan to allocate the emissions to our clients is based on the identification of the consumption of the raw material and the generated waste associated to the different centers, establishing the relationship between the different centers and the clients associated to them.

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

Requesting member Cellnex Telecom SA

Group type of project Relationship sustainability assessment

Type of project

Assessing products or services life cycle footprint to identify efficiencies

Emissions targeted

Actions to reduce customers' operational emissions (customer scope 1 & 2)

Estimated timeframe for carbon reductions to be realized

0-1 year

0

Estimated lifetime CO2e savings

Estimated payback

1-3 years

Details of proposal

The project could address the following phases: - A proposal with a package of energy-saving measures for the customer's facilities on which Sacyr performs maintenance operations - The review of the maintenance plan to reinforce preventive maintenance operations

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives? No

SC3.1

(SC3.1) Do you want to enroll in the 2020-2021 CDP Action Exchange initiative? No

SC3.2

(SC3.2) Is your company a participating supplier in CDP's 2019-2020 Action Exchange initiative? No

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services? No, I am not providing data

Submit your response

In which language are you submitting your response? English

Please confirm how your response should be handled by CDP

	I am submitting to	Public or Non-Public Submission	Are you ready to submit the additional Supply Chain Questions?
I am submitting my response	Investors	Public	Yes, submit Supply Chain Questions now
	Customers		

Please confirm below

I have read and accept the applicable Terms