

sacyr



NATURAL CAPITAL REPORT

2021-2023



Corporate General Manager

Quality, Environment and Energy Department



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Welcome Letter

Biodiversity plays a fundamental role in reducing the effects of climate change, which is why **the protection and restoration of ecosystems is essential** to meet emission reduction targets.

For Sacyr, protecting the natural environment is a priority in the projects we develop. **Our 2021-2025 Strategic Plan places sustainability as a fundamental axis for the company.** This strategy is developed in the Sacyr Sustainable 2021-2025 Plan, which includes the “Planet Ambition” pillar. Under this umbrella, we have defined biodiversity conservation targets for 100% of new contracts and we are committed to reducing our water consumption by 10% by 2025.

Through our Integrated Management System, we apply strict operational control and preventive measures to reduce our impact on ecosystems. We involve our supply chain in the protection of nature, evaluate biodiversity in the approval of suppliers, and extend an environmental Code of Conduct to all employees. Through this mission, **we advance with our commitment, reducing and avoiding the loss of biodiversity and restoring natural environments in the projects we develop.**

Following the mitigation hierarchy as a management approach, we conducted a materiality analysis to identify the most relevant ecosystem services for our activity, designed our own methodology for calculating the natural capital balance and developed an exhaustive study of our impacts, dependencies, risks, and opportunities derived from nature.

For Sacyr, **protecting the natural environment is a priority** in the projects we develop.

In this our first Natural Capital Report, we wanted to reflect all the commitment, effort, perseverance, and know-how behind the projects we develop. Our team in each country is responsible for protecting the spaces and ensuring that our activity is carried out in harmony with nature, respecting the value and beauty of the ecosystems.

Sacyr will continue to advance in its objectives to protect biodiversity and natural capital in its projects in the future, aware that it is an essential value in our sustainability strategy, but beyond that, also for responsible economic and social development in the world. The more we contribute to extending this essential culture of integral care for the environment, the closer we will come to fulfilling our aspiration to be a reliable company of reference for all our stakeholders.

Fernando Lozano Sainz
Sacyr Corporate General Director



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1. Introduction



1 | Introduction

At Sacyr we are committed to protecting the natural environment where we operate, which we address from a global standpoint, with an integrative approach and a proactive attitude. Caring for nature is one of the four key pillars included in the company's Environmental Strategy, along with the fight against **Climate Change**, the commitment to the **Circular Economy** and the construction of **Sustainable Cities**.

Natural capital provides people with ecosystemic services that are essential for life and biodiversity, playing a pivotal role in reducing the effects of climate change. The protection and restoration of ecosystems is essential to meet emissions reduction targets.

Throughout this Report, Sacyr's governance model, the company's impacts and dependencies, and the risks and opportunities related to nature are presented, aligned with the *Taskforce guidelines. on Nature-related Finance Disclosures* (TNFD) published to date. This document includes the actions carried out by the company in the period from 2021 to 2023.

We are committed to **protecting the natural environment where we operate**, which we address from a global standpoint, with an integrative approach and a proactive attitude.

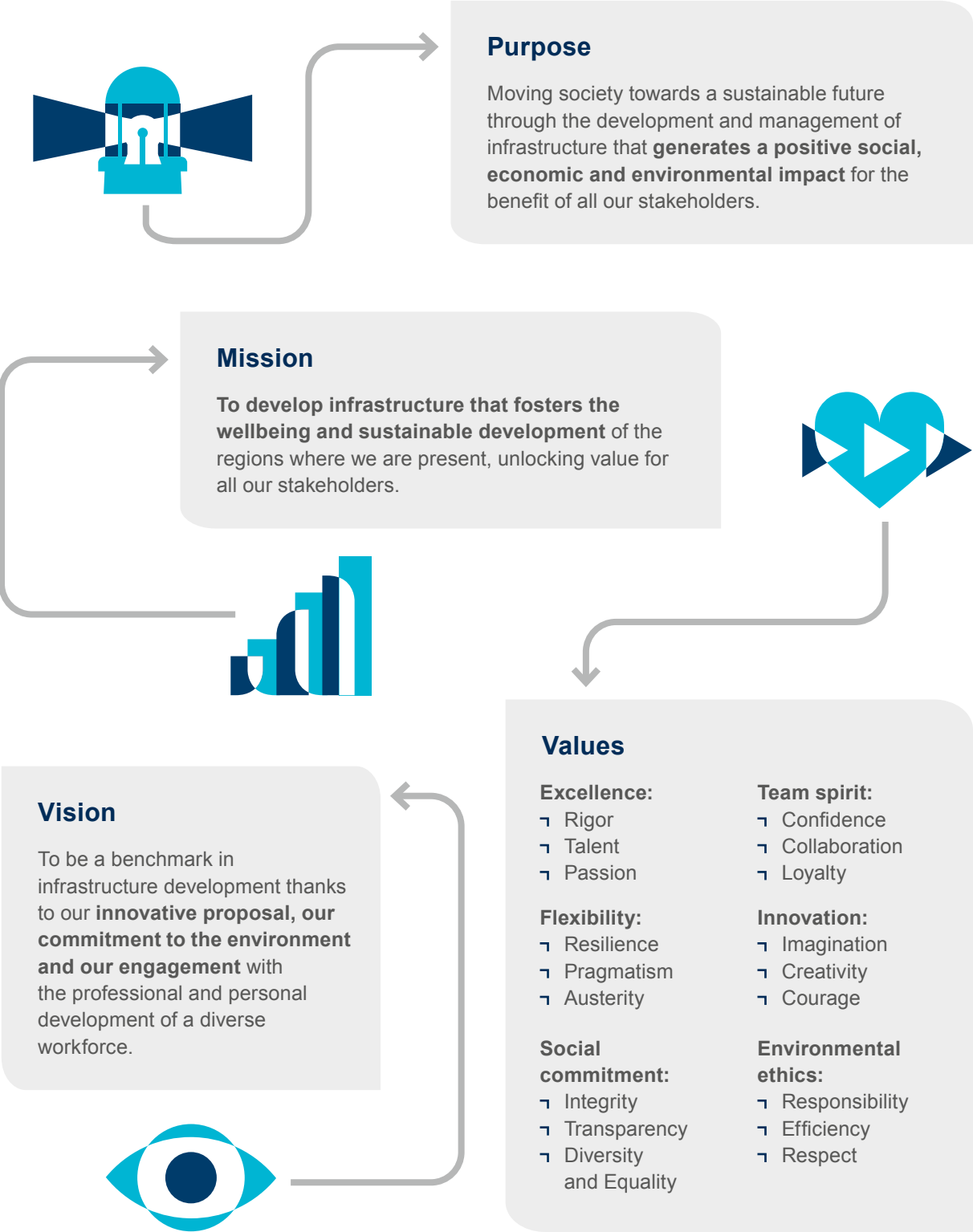


2. Sacyr at a glance



2 | Sacyr at a glance

Sacyr is a global group, listed on the Ibex 35 benchmark index of the Spanish stock exchange.. We operate in more than 20 countries on four continents, where we implement innovative projects with high environmental, social and economic impact.

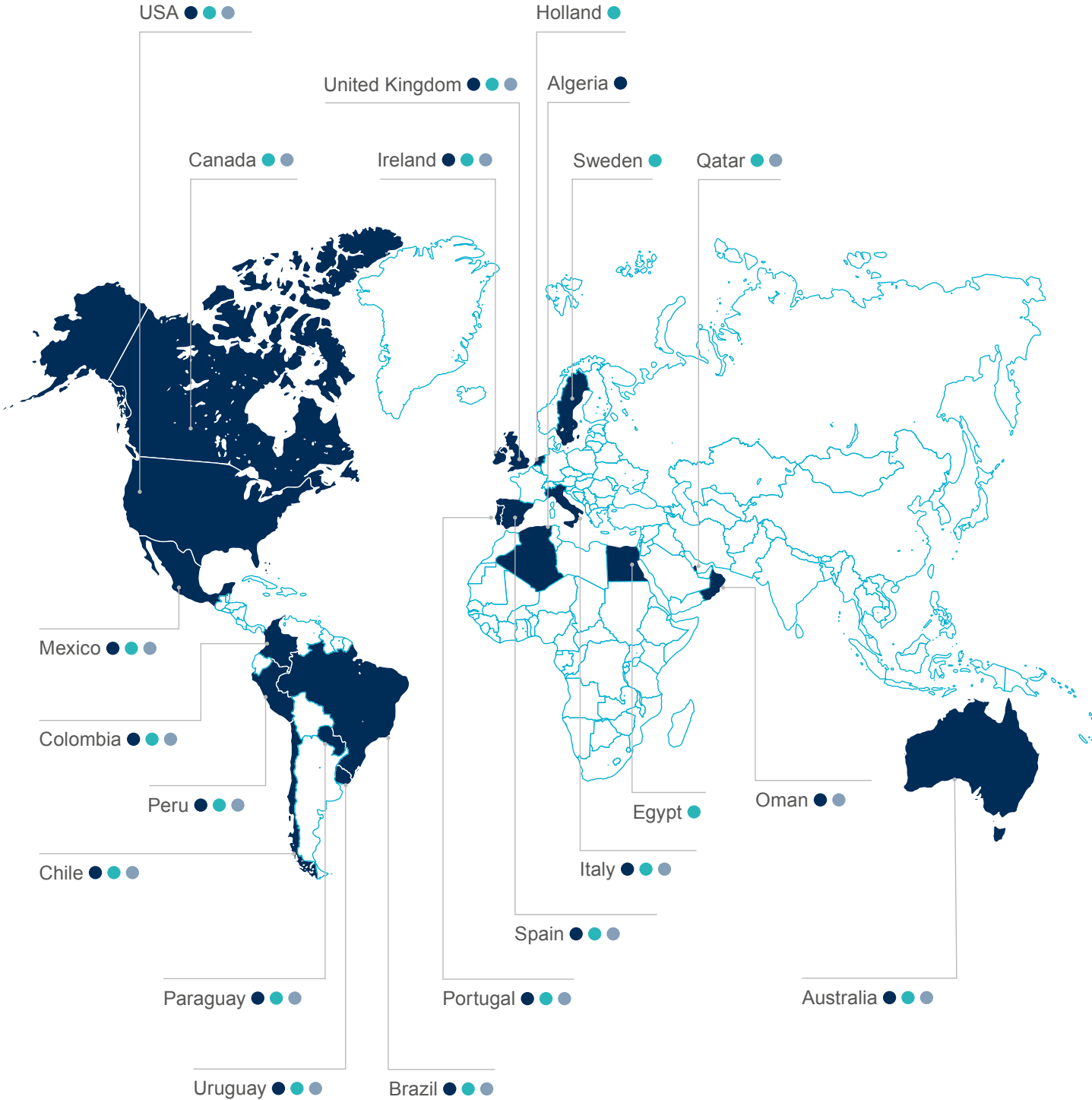


In recent years, at Sacyr, we have redefined our company profile, based on a concessional business model that intervenes in the entire value chain of the infrastructure sector (transport, renewables, water and singular buildings), from the tender, design and financing, to construction, operation and maintenance of assets.

In this respect, Sacyr is consolidating its position in two strategic businesses: **Concessions and Engineering and Infrastructure.**



International Presence



Concessions ●
Infrastructure ●
Offices ●

3. Sustainable Future



3 | Sustainable Future

We are aware of our role as a driver of change in society and for years, we have aligned our commitment with the Sustainable Development Goals set out in the **United Nations 2030 Agenda**, placing it as one of the central axes in the future vision of the company.

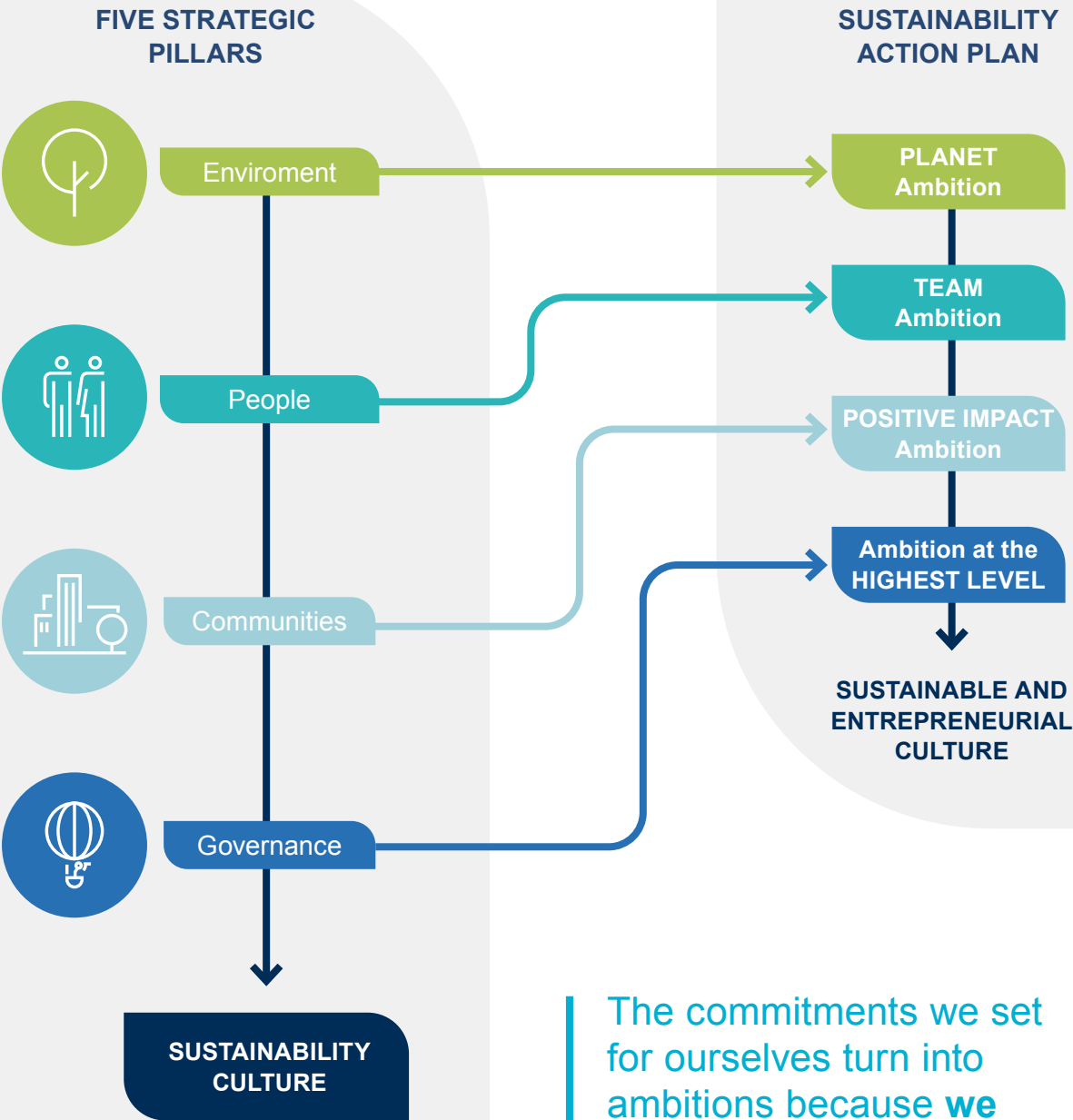
The 2021-2025 Strategic Plan is the roadmap guiding the Group's actions. This plan positions stability as a pivotal axis for the company. Included in this Strategic Plan, the [Sacyr Sustainable Plan 2021-2025](#), is developed, our sustainability action plan for the period 2021-2025, approved by the Sustainability and Corporate Governance Committee and the Board of Directors itself.



Sustainable development is one of the fundamental pillars of our Strategic Plan 2021-2025.

Within the [Sacyr Sustainable Plan 2021-2025](#) there are five strategic pillars: environment (**Planet Ambition**), people (**Team Ambition**), communities (**Ambition Positive Impact**), governance (**Ambition at the highest level**) and sustainability culture (**Ambition sustainable and entrepreneurial culture**). The commitments we set become ambitions because we want our challenges to go beyond general initiatives.

With this objective, and to achieve sustainable development in the future, we created a **Sustainability and Corporate Governance Commission**, delegated by the Board of Directors, made up mostly of independent directors, and a **Sustainability Committee** chaired by the company's CEO.

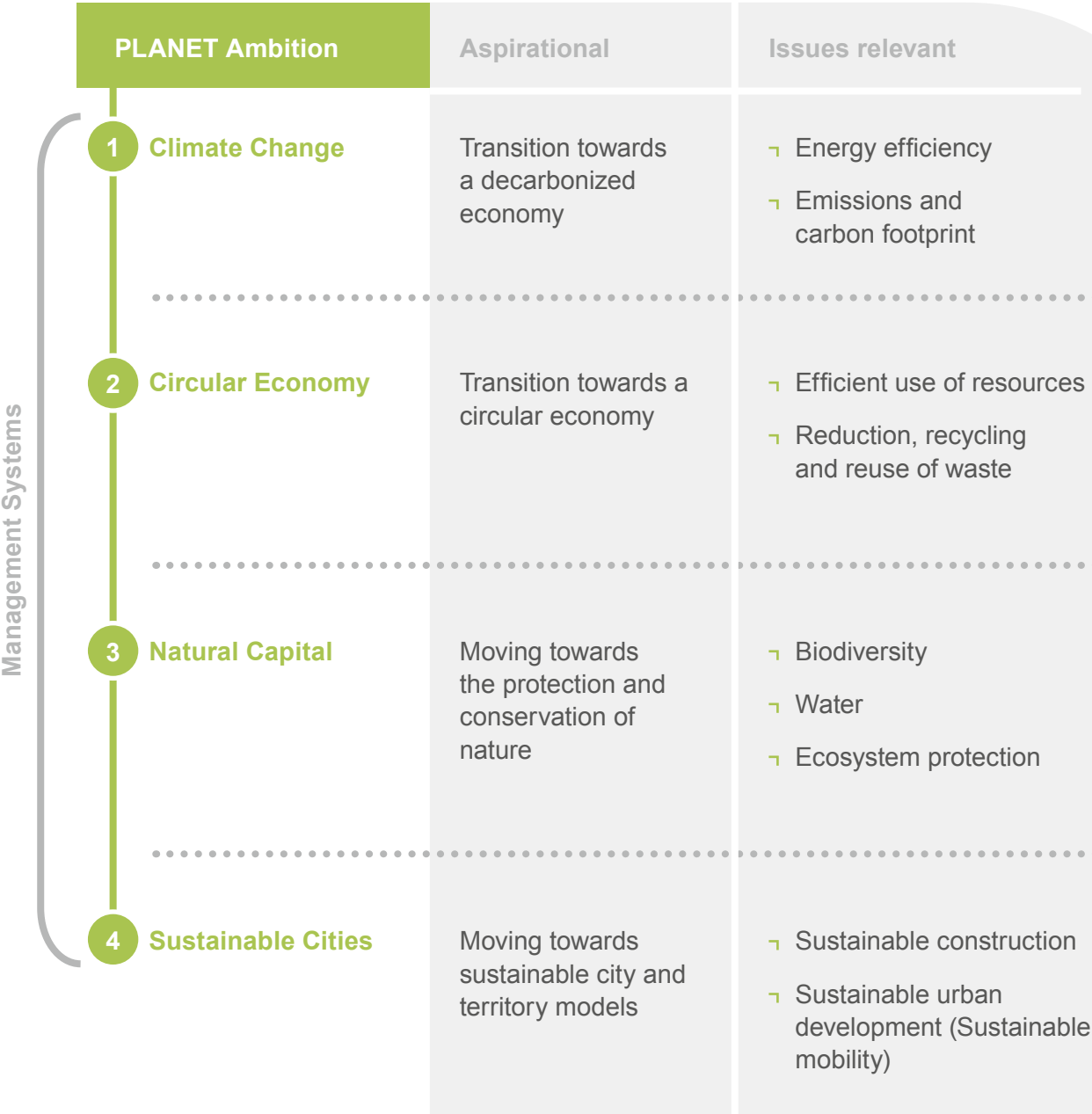


The commitments we set for ourselves turn into ambitions because **we want our challenges to go beyond general initiatives.**

The “**Planet Ambition**” pillar has the objective of responding to the most relevant challenges in terms of the environment, following the path already marked since the beginning of the company and as a key factor within the current business strategy.

Along these lines, we are committed to fighting climate change, betting on circular business models, **reducing pressure on natural capital** and developing and promoting sustainable cities and territories.

The planet ambition is developed throughout our entire value chain, involving the different interest groups and supported by innovation, training and internal awareness actions.

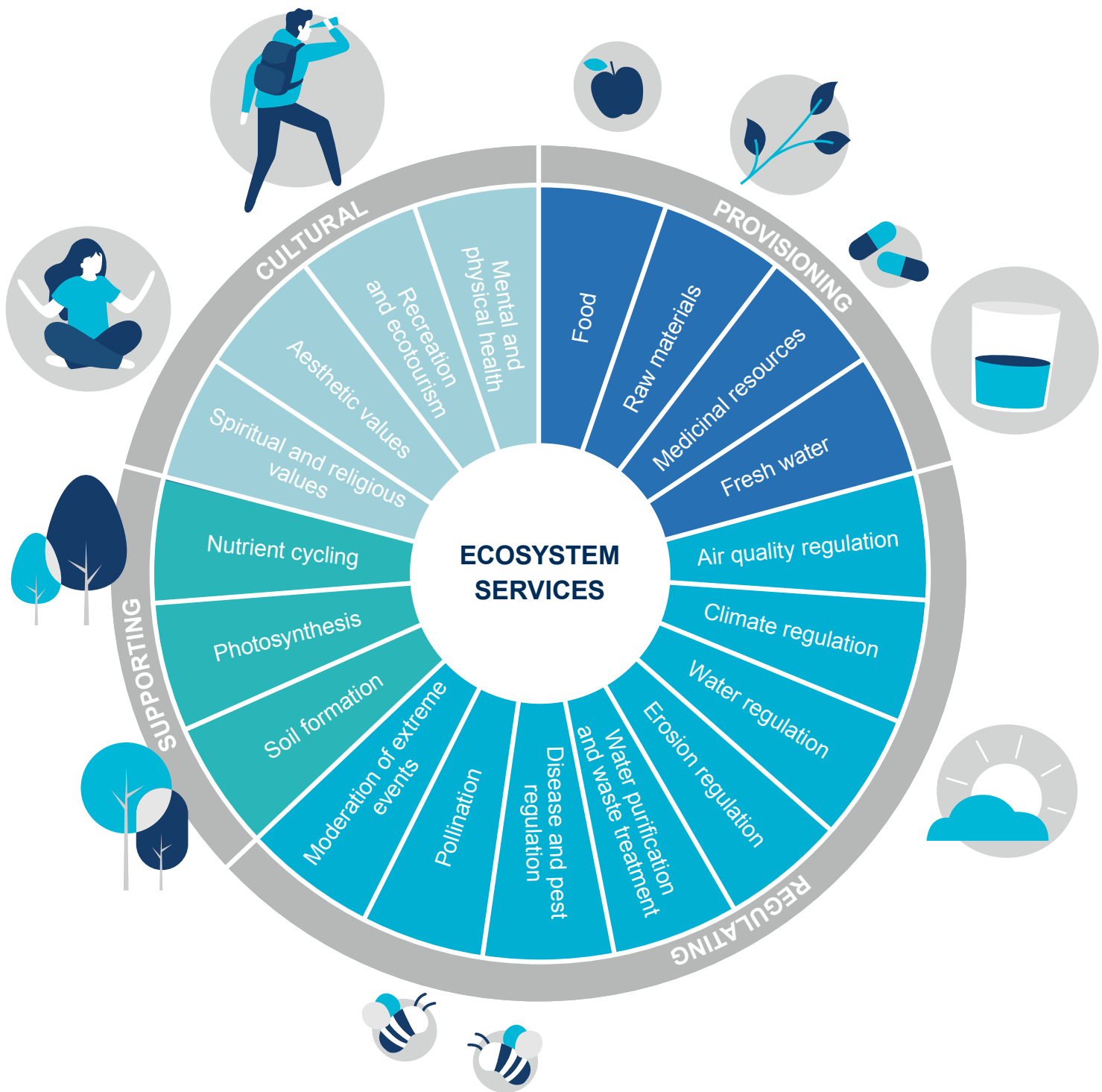


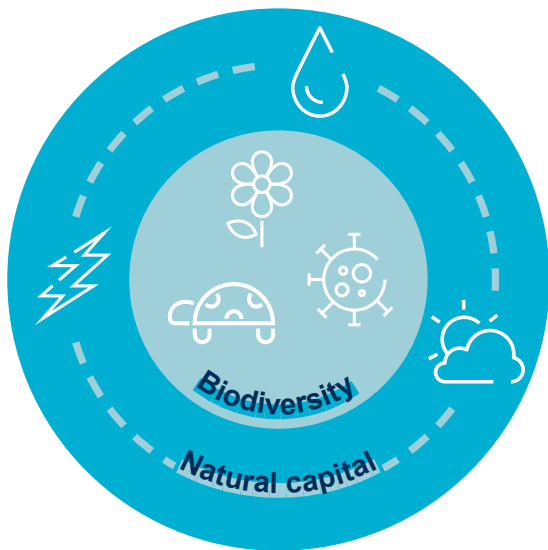
4. We take care of Natural Capital



4 | We take care of Natural Capital

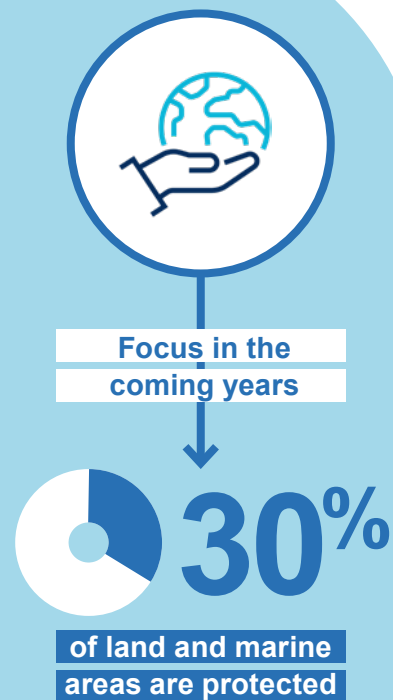
Natural capital is a set of elements of nature that provide benefits to society such as forests, fisheries, rivers, biodiversity, soils, minerals, the atmosphere and oceans, as well as natural processes and functions. Natural capital includes both living (fauna and flora) and non-living (fuels and minerals) aspects of ecosystems.





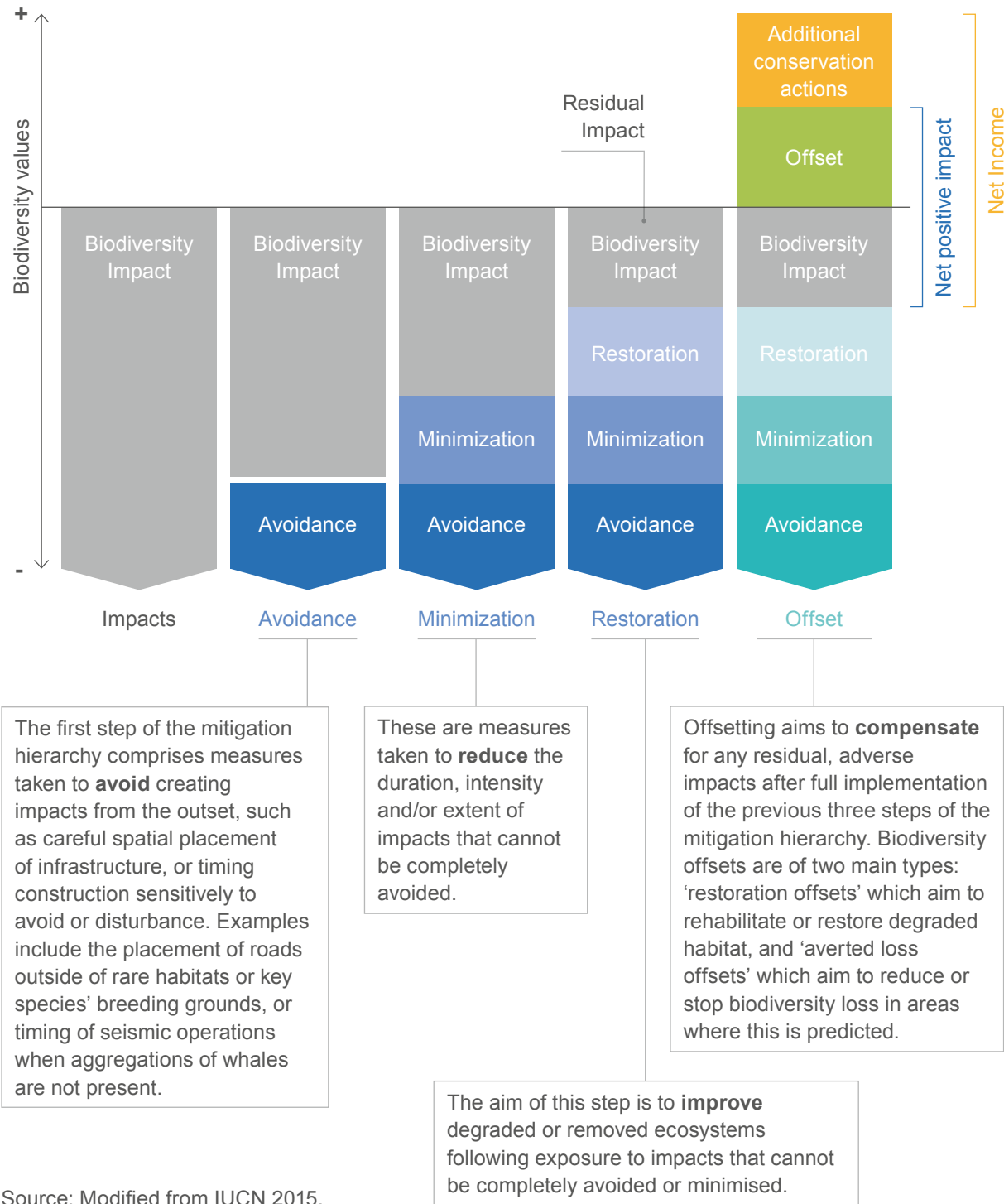
While **natural capital** refers to the benefits that natural resources potentially provide us, **biodiversity** refers to the living beings on the planet, their ecosystems, and the relationships they establish among themselves.

At the last United Nations Biodiversity Summit, **COP15**, adapting the **Post-2020 Global Biodiversity Framework**, the **Kunming-Montreal Agreement** was closed, which establishes 23 action goals to adopt urgent measures before 2030 and four objectives to live in harmony with nature in 2050. The focus in the coming years is to ensure that at least 30% of land and marine areas are protected. Likewise, **Science Based Targets Network (SBTN)**, a network of more than 45 organizations - among which are the same ones that promote Science Based Targets Initiative (SBTi) -, is developing science-based targets that allow companies to align their efforts with the objectives established in the United Nations frameworks (Global Convention on Biological Diversity Framework, Convention to Combat Desertification, Agreement of Paris and Agenda 2030). The challenge for 2025 is that companies have adopted science-based objectives for nature (water, land, ocean and biodiversity).



Collaboration between organizations and companies is essential to meet the European agenda, stopping the loss of biodiversity by 2030 and achieving its recovery by 2050. At Sacyr, we accept the challenge and continue to pursue our commitment, reducing and preventing the loss of nature, restoring, regenerating and transforming current systems to curb the agents that have an adverse impact on biodiversity.

For the integral management of these impacts in this area, **we use the mitigation hierarchy as a framework for action**, which allows us to project the impacts of our projects from an environmental and social standpoint, helping to avoid or minimize them, and performing restoration work to compensate for possible impacts or losses, generating a positive balance or a net gain. The mitigation hierarchy is aligned with the Precautionary Principle, one of the guiding principles of European Union environmental law, included in the EU 2020/852 Taxonomy Regulation, in which the potential impacts on the environment are analyzed from an absolute perspective.



Source: Modified from IUCN 2015.

Since 2020 we have achieved **great milestones** in terms of natural capital and biodiversity:

2021

- **January-November** | Execution of the 2020 **Water Footprint Pilot Project** – Spain and Chile
- **March** | Inclusion of Natural Capital as an **area of action in the 2021-2025 Sacyr Sustainable Action Plan**.
- **May** | Launch of the **#MATERIA** project to identify ecosystemic services and it takes place the **4th edition of iChallenges** with the challenge 4, digitalisation to measure Natural Capital (pilot test on Pamplona-Cúcuta highway in Colombia).
- **June** | Adherence to the **Biodiversity Pact**.
- **October** | Start of the **#DIANA** project to calculate the balance of Natural Capital in the Pamplona-Cúcuta highway in Colombia
- **December** | Presentation of the winner of **iChallenges: NBI** winner of Challenge 4: Natural Capital.

2020

- **June** | Approval of the [Biodiversity Policy](#) and [Water Policy](#).

2022

- **May** | Adherence to the “**Nature Business Ambition**” initiative launched by Forética.
- **September** | Named finalist of the Reuters Responsible Business Awards.
- **December** | Creation of the **Biodiversity Committee** and update of the [Biodiversity Policy](#). Ranked **2nd in Nature Benchmark’s 2022 index** of companies most committed to nature.

2023

- **January-November** | Execution of the **2021 Water Footprint Pilot Project** – International
- **April** | launched a project **+NAT** to analyze the risks and opportunities of nature.
- **May** | Renewal of our adherence to the **Biodiversity Pact** with the formula “**Action**”.
- **June** | Adherence the alliance **Natural Capital Factory**.
- **July** | Sacyr joins the European **business@biodiversity** network.
- Start of development of the **natural capital measurement** tool together with NBI.

4.1 Governance

Disclosing the organization's governance regarding nature-related dependencies, impacts, risks and opportunities is one of the four pillars included in the TNFD framework recommendations.

Policies

Our commitment to the protection and conservation of the environment is incorporated into the [Quality, Environment and Energy Policy](#), which guides our actions in this area.

At the same time, we have a [Biodiversity Policy](#), aimed at all interest groups and approved by the Board of Directors, which defines and establishes the principles and criteria that govern actions regarding biodiversity, aimed at conservation, restoration and sustainable use of ecosystems, halting the loss of biological diversity, rehabilitating degraded soils, and mobilizing and increasing financial resources.

On the other hand, the [Water Policy](#) guides actions on the care, conservation and sustainable management of this resource.

We actively promote nature protection in our dealings with stakeholders. We involve our entire supply chain in nurturing the environment, analyzing the biodiversity strategies of our suppliers in their approval process and in the company's [Code of Ethics and Conduct](#), which is binding on all collaborators. We also have a [Supply Chain Management Policy](#) whose objective is to extend our commitments, policies and values to our entire value chain.

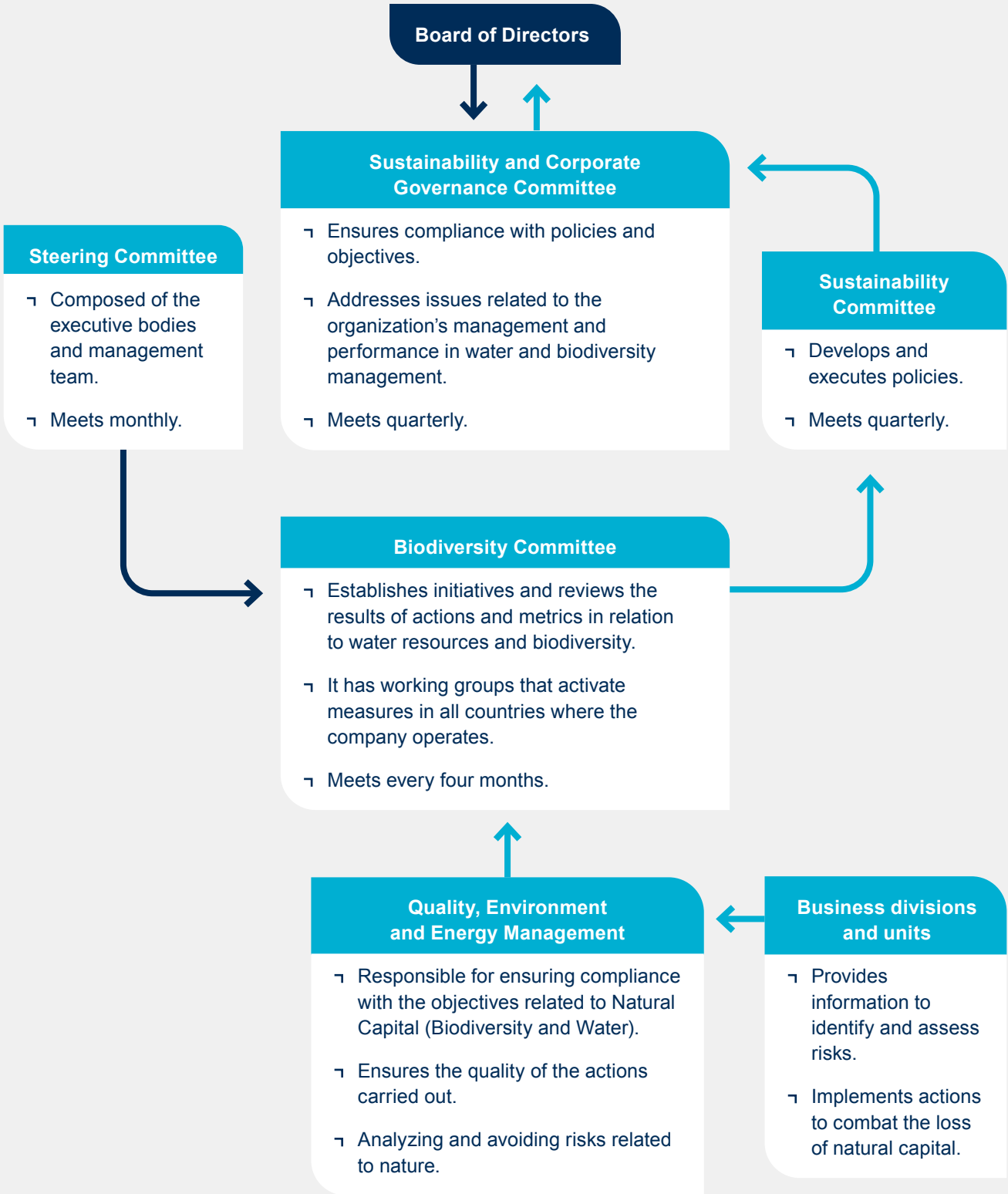
Organs

The **Quality, Environment and Energy Department** is responsible for ensuring compliance with Sacyr's environmental commitments, underwriting the quality of its projects, minimizing the potential impact of its activities on the environment, and anticipating future risks.

To ensure the integration of the environmental aspect, the application of the policies and the fulfillment of the established goals, we set up the **Sustainability and Corporate Governance Committee**, a delegate committee of the Board of Directors, and the Sustainability Committee, which are the most senior bodies responsible for sustainability matters.

In 2022, we created a **Biodiversity Committee** to reinforce our commitment to natural capital. The main objective of this body is to devise initiatives and review results related to biodiversity projects. The Committee is **led by the Corporate General Manager** and includes environmental experts from all areas of the company. This Committee meets quarterly and is a meeting point between the

different Quality and Environment managers of the locations where we operate. In these meetings, those responsible share measures that they have implemented in the projects and the results obtained.



Together, we protect what matters

- So that everyone in the organization takes part in this area, in 2023 we have developed an online **training itinerary** through our Explora platform, which allows us to understand what natural capital consists of, its global relevance, regulatory and market trends, the impacts and dependencies and why it is necessary to value it economically.
- In addition, we send a quarterly **Newsletter** from the Quality, Environment and Energy Department, where we communicate regulatory news, and a greater variety of content, such as recommendations for books, documentaries or films about the environmental challenges we face, as well as habits to reduce the environmental impact on a daily basis.
- **We celebrate World Environment Day.**
 - At **Sacyr Chile and at the Sacyr headquarters in Spain**, under the motto **“Show your idea and let your plant grow,”** aromatic plants were given away in exchange for employees leaving their idea on how to continue improving the environment at Sacyr.
 - In **Peru**, through the **“Reusing with Sacyr Perú”** program, they gave employees planting kits and the possibility of purchasing refurbished computers at a symbolic price to give them a second life.



Video published on the occasion of World Environment Day 2023:
https://www.youtube.com/watch?v=NVmMCOt_xgE

- In Paraguay, the campaign “Exchange your plastic bottles for a seedling” has been implemented, the purpose of which is to invite all collaborators to exchange plastic bottles for a native tree seedling.



- We collaborate with the Libera Program, powered by SEO Bird Life and Ecoembes against Garbage. Several Sacyr teams have carried out this corporate **volunteering**, collecting **garbage** in the Periurban Green Space – La Cantera Park (Madrid). In Peru, the Road Services Manager “GESVIAS” also carried out a waste collection day with equipment such as a backhoe and a dump truck.



- In the **Sótero del Río Hospital project** (Chile), waste management is being carried out in which the construction and demolition waste generated is recycled and recovered. Banks are being made with the plastic waste generated in the project to be used in the project itself. This seeks to sensitize the workers themselves about the importance of segregation on site.
- **Expo Fair** was held in **Peru**, where relevant topics in environmental care were shown and under the motto **“No Plastic Pollution”** established by the United Nations Environment Program (UNEP) for this year.



Alliances

▸ MITECO Biodiversity Pact:

We adhere to the [Pact for Biodiversity](#), promoted by the Ministry for the Ecological Transition and the Demographic Challenge of the Government of Spain and the Spanish Business and Biodiversity Initiative (IEEB). The signing of this pact by our president supports the three objectives of the United Nations convention on biological diversity and shows our commitment to assess our impact on natural capital, take it into account in our decision-making, define objectives and involve to the supply chain in the integration of this management, among others. **In 2023**, we renew our membership under the “Action” formula, committing to **assess and disseminate the impacts and dependencies of biodiversity and natural capital derived from our operations**. With our participation in this initiative, companies assume the 10 inspiring principles for biodiversity and natural capital, supporting the mission to 2030 and the vision to 2050 of the post-2020 Biodiversity Framework established in the Kunming-Montreal Agreement.

The signing of this pact [...] supports the three objectives of the United Nations convention on biological diversity.



▸ Nature Business Ambition:

For the second consecutive year, we joined the “[Nature Business Ambition](#)” initiative launched by Forética. The objective is to boost ambition, promote action and encourage the creation of alliances to contribute to the recovery of nature and biodiversity as a key axis to achieve a “Nature -positive” planet in 2030. In 2023-2024 we have been part of the second edition of this initiative, whose final objective has been to support companies in measuring their impacts and dependencies on nature, to accompany them in setting improvement objectives based on science and aligned with the main frameworks and tools available.

Annual Meeting Biodiversity Pact (IEEB) 2023.



Last June we hosted the first meeting of the 2nd edition at the Sacyr headquarters where we discussed the new frameworks and trends for measuring and valuing nature.

- **Spanish Group for Green Growth (GECV):**
 We are members of the [Spanish Group for Green Growth \(GECV\)](#), association formed by more than 50 companies of various sizes and profiles that share an ambitious approach when addressing environmental challenges. They include large companies that represent 40% of the IBEX and also SMEs involved in innovation.
- **Natural Capital Factory:**
[Natural Capital Factory](#) initiative, a collaborative regional platform that allows companies to be aware of market trends related to the business management of natural capital.
- **EU Business & Biodiversity:**
 We are members of the [EU Business & Biodiversity platform](#). The European Commission has created the European Business and Biodiversity Platform to collaborate with companies and help them measure and integrate the value of biodiversity into business decision-making. The main objective of the Platform is to mobilize a critical mass of business actors in Europe and beyond to achieve the objectives of the EU Biodiversity Strategy for 2030 and guarantee “a world living in harmony with nature” by 2050, as called for in the Kunming-Montreal Global Biodiversity Framework.
- **Alliances for water:**

 - ▾ We are part of associations such as AEDyR (Spanish Desalination and Purification Association), IDA (International Desalination Association), Water Technology Committee

Last June, we hosted the first meeting of the 2nd edition of the *Nature Business Ambition* initiative at Sacyr’s headquarters, where we discussed the new frameworks and trends for measuring and valuing nature.

in SEOPAN, IMDEA (Madrid Institute of Advanced Studies-Water), ICEX Strategic Guidance Council, AEAS (Spanish Association of Supply and Sanitation), AGA (Spanish Association of Urban Water Management Companies and ALADYR (Latin American Association of Desalination and Water Reuse).

- ▼ Sacyr has joined the **Territorial Water Efficiency Agreement (APL)**, the first water efficiency agreement in Chile. This is a voluntary public-private commitment that seeks to address water scarcity and the challenges of climate change in one of the communities with the highest risk of water rationing in the Metropolitan Region.

▮ Recognitions

- ▼ The [Nature Benchmark 2022](#), prepared by World Benchmark Alliance ranks us as second among the companies most committed to nature (based on governance, biodiversity and impact on the community) and first among infrastructure companies in terms of biodiversity and ecosystems.
- ▼ We were finalists in the **Biodiversity Champion category** in the [Reuters Responsible Business Awards](#) in recognition of our commitment to the conservation and sustainable use of biodiversity. Reuters, with this distinction, highlights those companies that are leading the way to a sustainable future. This recognition highlights our compliance with the Sacyr Sustainable Plan 2021-2025 in the specific area of natural capital.
- ▼ We participated in the **NBA Forum** promoted by Forética, organized by the Nature Business Ambition initiative, an in-person event with more than 100 attendees and which could also be followed by streaming.



At Sacyr, we share the projects we carry out to measure our impact on Natural Capital and advance on the path towards Nature Positive.

- We are present at the **V Colombian Congress of ecological restoration**, with a presentation on restoration of degraded ecosystems in the Canal del Dique, we explain how through the implementation of 36 works in 14 functional units, we seek to protect the biodiversity of the region and in a simultaneously mitigate the risk of flooding.

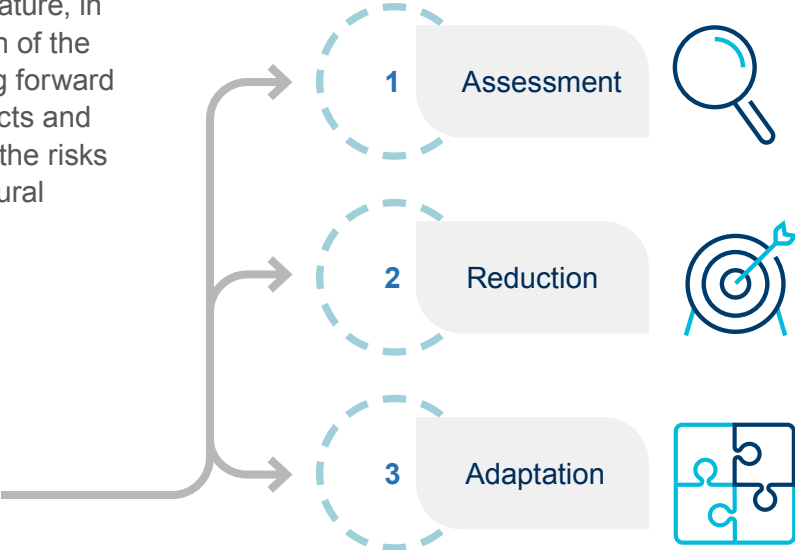


- We participate in conferences and conferences to raise awareness about the importance of water resources, among which the IDA World congress stands out. Congress Desalination and Reuse, European Congress Desalination Society (EDS), EDS Conference Desalination in agriculture and water-energy-food nexus, AEDyR Agriculture and Water Conference, AEAS Congress, and IV National Water Congress in Albaterra.

4.2 Our path to live in harmony with nature

Aware of the effort that companies must make to live in harmony with nature, in 2020 we began with the design of the natural capital strategy, moving forward with the measurement of impacts and dependencies and analysis of the risks and opportunities linked to natural spaces.

Our strategy has three key pillars:



4.2.1 Assessment

Valuation of Natural Capital



1. Identification

Following the mitigation hierarchy as a management approach, we launched a project to understand the potential impacts of our activity. Thanks to this initiative we identify the ecosystem services included in the CICES classification (Common International Classification of Ecosystem Services) that are materials for the company.

To carry out this identification, the following were considered:

- ▮ The policies approved by Sacyr on climate change, biodiversity and water.
- ▮ The demands of stakeholders, such as legal and government requirements.
- ▮ Lessons learned from other projects.
- ▮ Studies and bibliography on possible impacts of linear infrastructures on natural capital.

As a result, we detected seven material ecosystem services for provision, twelve for regulation, and one cultural service.

CICES code	Category	Service Ecosystem
1.1.1.1	Provision	Cultivated terrestrial plants (including fungi and algae) for nutritional purposes
1.1.3.1		Animals raised for food
4.2.1.1		Waters superficial for consumption human
4.2.1.2		Surface water as material (for non-potable purposes)
4.2.1.3		Surface water for energy production
4.2.2.1		Groundwater for human consumption
4.2.2.2		Groundwater for consumption (uses other than drinking water)
2.1.2.3	Regulation	Screens and visual barriers
2.2.1.1		Erosion rate control
2.2.1.2		Damping and attenuation of mass movement
2.2.1.3		Regulation of the hydrological cycle and water flow (including flood control and coastal protection)
2.2.1.5		Fire protection
2.2.2.1		Pollination (gametes in the marine environment)
2.2.2.2		Seed dispersal
2.2.2.3		Maintenance of the habitat and the genetic reserve
2.2.3.1		Pest control (including species _ invasive)
2.2.5.1		Regulation of the chemical conditions of fresh water through processes regulated by living organisms
2.2.6.1		Regulation of the chemical composition of the atmosphere and oceans
2.2.6.2		Regulation of temperature and humidity, including ventilation and perspiration
3.2.2.1		Cultural

These services are essential to report the environmental evolution of projects.

2. Selection

In the second phase of this project, the risks and dependencies on ecosystem services were identified, associating specific measurement units for each of the services detected. These indicators were chosen from among the different indicators proposed by the MAES project (Mapping Assessment of Ecosystems and their Services), developed by the European Commission.

To select these indicators, criteria were considered such as the **availability of information in the projects, the ability of our team to obtain field data, and the suitability of the indicator for the ecosystem service to be measured.**

CICES code	Category	Ecosystem Service	Guidance measurement indicator
1.1.1.1	Provision	Cultivated terrestrial plants (including fungi and algae) for nutritional purposes	Cultivated area (Ha)
1.1.3.1		Animals raised for food	Livestock units (Ha)
4.2.1.1		Surface water for human consumption	Water flow (Hm 3)
4.2.1.2		Surface water as material (for non-potable purposes)	Water flow (Hm 3)
4.2.1.3		Surface water for energy production	Water flow (Hm 3)
4.2.2.1		Groundwater for human consumption	Piezometric level (m)
4.2.2.2		Groundwater for consumption (uses other than drinking water)	Piezometric level (m)

CICES code	Category	Ecosystem Service	Guidance measurement indicator	
2.1.2.3	Regulation	Screens and visual barriers	Visual analysis of the basin (Ha)	
2.2.1.1		Erosion rate control	Sediment emission (Tn)	
2.2.1.2		Damping and attenuation of mass movement	Sediment emission (Tn)	
2.2.1.3		Regulation of the hydrological cycle and water flow (including flood control and coastal protection)	Soil-water balance (ad.)	
2.2.1.5		Fire protection	Potential fire hazard (ad.)	
2.2.2.1		Pollination (gametes in the marine environment)	Pollination potential (ad.)	
2.2.2.2		Seed dispersal	There are no indicators	
2.2.2.3		Maintenance of the habitat and the genetic reserve	Protected area (ha)	
2.2.3.1		Pest control (including invasive species)	Invasive species richness (ud)	
2.2.5.1		Regulation of the chemical conditions of fresh water through processes regulated by living organisms	Various biochemical indices of water quality	
2.2.6.1		Regulation of the chemical composition of the atmosphere and oceans	Carbon sink (kg/C)	
2.2.6.2		Regulation of temperature and humidity, including ventilation and perspiration	Albedo (ad.)	
3.2.2.1		Cultural	Natural features or elements with existence value	Species richness (ud)

3. Design

We reflected the entire analysis in a robust measurement methodology that allowed us to calculate the balance of natural capital in the different assets of the company.

In order to homogenize the results, once the measurement indicators for each ecosystem service were obtained, the **concept of Equivalent Area SE was defined**, measured in equivalent hectares (ha eq). All indicators of each ecosystem service were transformed into the SE equivalent Area unit in order to obtain a balance of natural capital at the project level.

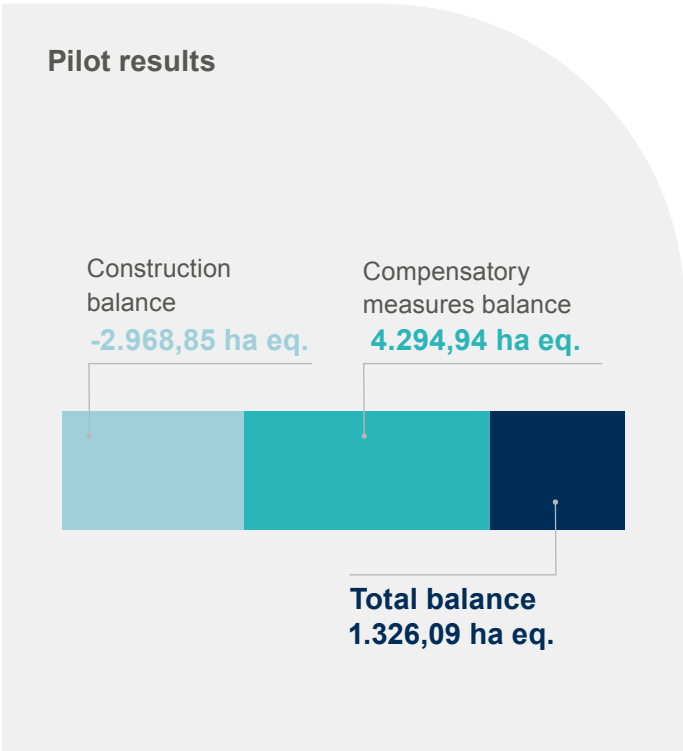
4. Pilot

To ensure the viability of the methodology, we launched a pilot project for the valuation of natural capital. We measure the impact on ecosystem services, in the Pamplona-Cúcuta project in the Northern Santander region (Colombia), to know the Balance of Natural Capital in the contract.

The balance of natural capital for each ecosystem in equivalent hectare was calculated to be able to equate all ecosystem services, regardless of their physical unit and thus be able to consolidate them. The total balance of natural capital (BT) is equal to the balance of the construction stage (BC) plus the balance of compensatory measures (BM).

The final assessment of the balance of the project showed that the balance of natural capital of the construction stage was negative, but thanks to properly designed and executed offsetting measures that reverse the degradation caused during the construction process, it became a **positive total net balance**.

Thanks to this effort, we have designed a standard natural capital valuation **methodology applicable to all our projects at any phase of their execution stage**.



Currently we continue to apply this methodology for the rest of our projects and thus be able to obtain the **global balance of natural capital** and be able to integrate it into the company's decision making.

Once the measurement methodology was developed, we began with the design of a platform with *Natural Business Intelligence* (NBI) that would allow us to measure our impacts on the environment through the calculation of the balance of natural capital, based on the 20 ecosystemic services, identified as materials for our operation, in all the projects we carry out.

We evaluate our water footprint

We are aware of the importance of water resources and the threat that water pollution and its scarcity pose to human health, the life of the planet’s habitats, and the economic development of societies, is committed to sustainable use and management of the water

In 2023, we have renewed our Sacyr water footprint verification certificate covering **all of the company’s activities globally**.

The evaluation of the footprint helps to identify and analyze in depth all the extraction and discharge water flows per facility, water consumption, water estimation methodologies have been established and the most appropriate impact categories have been selected for the activities of Sacyr measuring the effects on the availability of water resources, on human health and on ecosystems.



The objectives of the water footprint are:

- ▮ **Evaluate the direct and indirect water footprint** of the activities carried out by Sacyr in all the countries in which it is present with the aim of knowing the impacts on the environment related to the use and consumption of water.
- ▮ Serve as **a tool for decision-making**, to prioritise actions aimed at reducing the organisation’s most relevant environmental impacts related to water.
- ▮ Make the **results available to interested third parties** with the intention of conveying the importance of commitments related to sustainability for Sacyr.
- ▮ **Certification of the water footprint under the ISO 14046: 2014 standard.**



The **Impact assessment methodologies and impact categories** we use are as follows:

- 1. Environmental Footprint 3.1 (adapted) V1.00 / EF 3.1**
- 2. Ecological Scarcity 2021 V1.01**
- 3. Hoekstra et al. 2012 (Water Scarcity Indicator, WSI) V.1.04**
- 4. LC-IMPACT, average preference, all impacts, 100 years V1.02.**

As a result of this process, Sacyr **has been the first company in the infrastructure sector to certify its water footprint under the ISO 14046 standard**. The first certification was verified by AENOR in 2022, an organization that ratifies the information, data and results disclosed in the evaluation of the company's water footprint. The result of this verification was excellent, given the complexity of the project due to its high business volume and variety of activities.

The evaluation of our water footprint **includes all the group's activities worldwide** in the 18 countries in which it operates and considers **both the direct and indirect water footprint**, that is, that of its value chain. Our water footprint includes up to 18 relevant impact categories according to the four most internationally recognized methodologies and has a comprehensive approach, considering impacts on ecosystems, human health and water-related resources.

Thanks to the desalination facilities managed by Sacyr Agua, the company has a **very positive impact by providing fresh water in areas with very high water stress**.

4.2.2 Reduction

Protection, conservation and restoration of ecosystems

The performance of our contracts may impact biodiversity. The most significant impacts are alteration of habitat, impact on fauna and flora and loss of plant cover.

Also, sometimes our activities require using land temporarily or permanently. Additionally, our activities may be located within, affect sections of or be outside protected areas. In addition, we have carried out projects in areas with the presence of species included in the IUCN Red List and in national and regional lists. In all cases, we implement all the necessary preventive, minimizing and corrective measures to reduce possible impacts.

Under our **Integrated Management System**, inspections and preventive measures are carried out to avoid and minimize the impact on the sensitive species and areas identified in the projects. More than 82% of our activities are certified to ISO 14001 standards.

All our projects are compliant with the applicable environmental legislation of each country. At the company we monitor the Environmental Surveillance Plans (ESPs) or similar plans that derive from such environmental permits

With respect to species, **conservation and recovery plans** are a priority in all the projects we carry out. They aim to conserve the existing flora and fauna and improve the populations of species and their habitats, as well as compensate for environmental alterations caused by activities. In addition, the connectivity of populations is improved thanks to the construction of ecological corridors, environmental training is carried out aimed at raising awareness to preserve fauna and flora, and species monitoring is carried out.

We promote **ecological restoration actions** to mitigate the impacts caused by the execution of our contracts, aimed mainly at landscape integration, revegetation of surfaces, restoration of temporary occupation areas, etc. Most restoration activities contribute to reforestation to revitalize deforested areas and areas at high risk of desertification, eliminating erosive risks, increasing biodiversity and improving soil structure and organic matter. Likewise, the absorption projects that we support to offset our footprint often have a component that ensures the rehabilitation of degraded lands and soils.

In the initiatives section you can discover all the actions we have carried out to create and protect biodiversity and promote the efficient use of water.



4.2.3 Adaptation

Risk and opportunity analysis

At Sacyr we have a Comprehensive Risk Management System (SGIR), based on internal control and risk management standards COSO ERM (*Committee of Sponsoring Organizations of the Treadway Commission*) and ISO 31000 (*International Organization for Standardization*), with the aim of facilitating key business decision-making, under a common risk culture, through a systematic and structured analysis of the risks inherent to our business activity. The Risk Committee is the person most responsible for the Comprehensive Risk Management System (SGIR) of the Sacyr Group and for all the decisions associated with it.

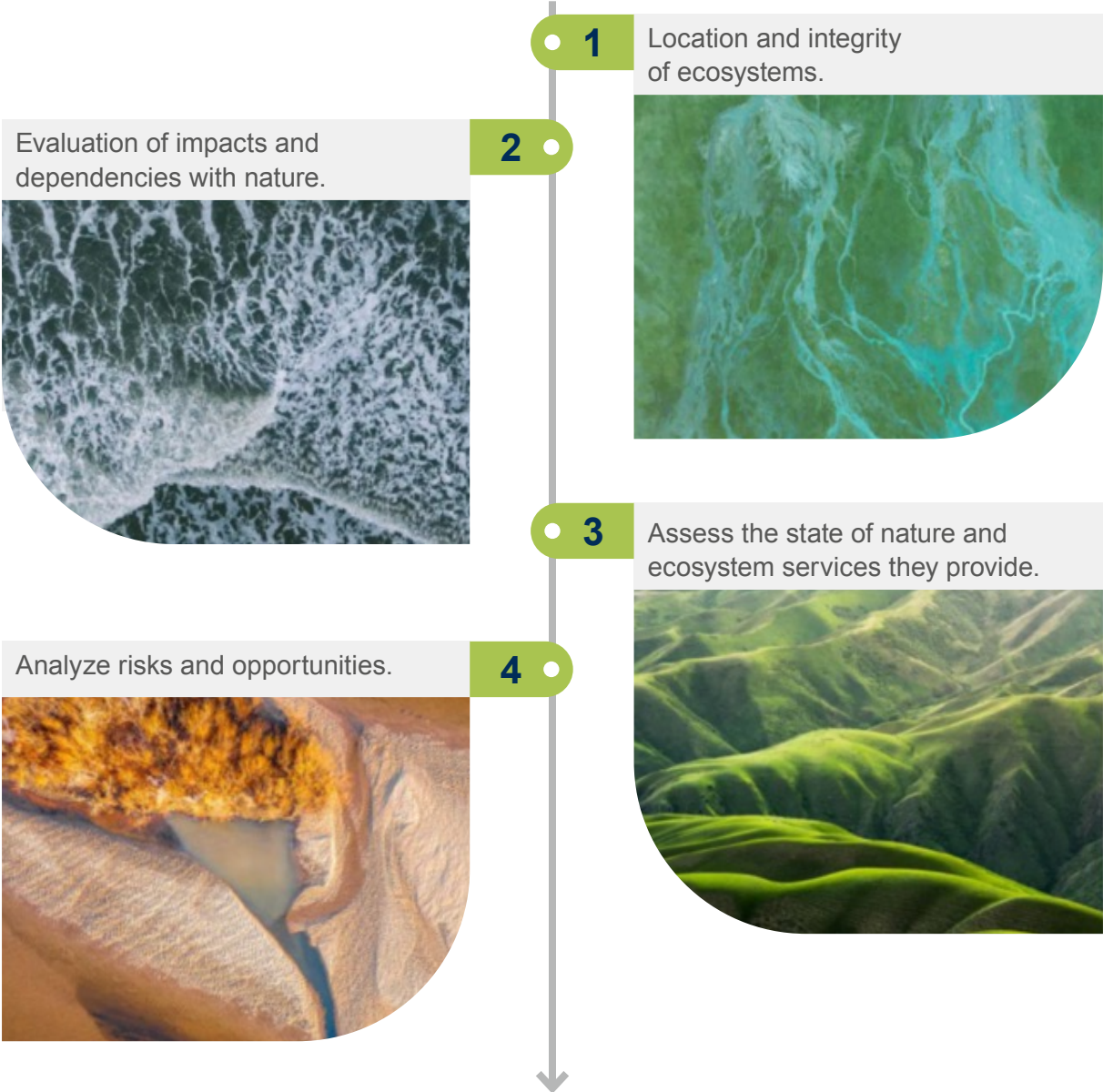
As established within the framework of the Environmental Management System implemented according to ISO 14001, environmental risk management is one of the key aspects in any business and at Sacyr we carry out a robust process under this framework, carrying out an identification and assessment of the risks and opportunities associated with our activities. Once identified, we establish operational control for its correct management and monitoring.

With regard to **water** specifically, the main risks related following the framework of the Environmental Management System implemented according to ISO 14001 are, the scarcity and limitation of water resources, extreme weather phenomena (for example, droughts, heat waves and floods) and changes in the regulation of collection and discharge authorizations, as well as in rates, which could lead to restrictions on the use or availability of water for the execution of activities and provision of services and an increase in costs.

In order to continue improving our risk analysis, adapting to new frameworks, we have followed the guidelines established in the LEAP (Locate, Assess, Audit and Prepare) methodology of the TNFD.

In this process we have begun by analyzing the vulnerability of the ecosystems and biodiversity where the company's activities are carried out, selecting ecosystem integrity metrics and the water stress of the territories. With this information, the most vulnerable areas have been prioritized.

Once the areas of vulnerability are known, we have measured five impact drivers: changes in land use, pollution, use of natural resources, climate change and impact on biodiversity. The result of this process are impact and dependency matrices. For these matrices, the impact that each impact driver has on the different activities of the company has been evaluated from 1 to 5, on the one hand, in the construction phase and, on the other hand, in the operation phase.



SE dependencies

Ecosystem service	Airport	Roads	Railway Work	Construction Site	Port Construction	Oil & Gas	Electricity Generation Plant	Waste Plant	Dams	Water Treatment	Urbanization
Cultivated terrestrial plants (including fungi and algae) for food	○	○	○	○	○	○	○	○	○	○	○
Animals raised for food	○	○	○	○	○	○	○	○	○	○	○
Screens and visual barriers	○	○	○	○	○	○	○	○	○	○	○
Control of erosion rates	○	○	○	○	○	○	○	○	○	○	○
Damping and attenuation of mass movement.	○	○	●	○	○	○	○	○	○	○	○
Regulation of the hydrological cycle and water flow (including flood control and coastal protection)	○	○	○	●	●	●	●	○	●	●	●
Fire protection	○	○	○	○	○	○	○	○	○	○	○
Pollination (gametes in the marine environment)	○	○	○	○	○	○	○	○	○	○	○
Seed dispersal	○	○	○	○	○	○	○	○	○	○	○
Maintenance of habitats and the gene pool	○	●	●	○	●	○	○	○	●	○	○
Pest control (including invasive species)	○	○	○	○	○	○	○	○	○	○	○

Ecosystem services aligned with Sacyr's technology dependencies. The colors indicate the relevance of each ecosystem service in the different phases of the life cycle: ● new developments, ● operation, ● new developments and operation.

Ecosystem service	Airport	Roads	Railway Work	Construction Site	Port Construction	Oil & Gas	Electricity Generation Plant	Waste Plant	Dams	Water Treatment	Urbanization
Regulation of the chemical conditions of freshwater through processes regulated by living organisms	●	●	●	●	○	●	●	●	●	●	●
Regulation of the chemical composition of the atmosphere and oceans	○	○	○	○	●	○	○	○	○	○	○
Regulation of temperature and humidity, including ventilation and perspiration	○	○	○	○	○	○	○	○	○	○	○
Natural features or elements with existence value	●	●	●	●	●	●	●	●	●	●	●
Surface water for human consumption	○	○	○	○	○	○	○	○	●	○	○
Surface water for consumption (uses other than drinking water)	○	●	●	●	○	○	○	○	●	●	●
Surface water for energy production	○	○	○	○	○	○	○	○	○	○	○
Groundwater for human consumption	○	○	○	○	○	○	○	○	○	○	○
Groundwater for consumption (uses other than drinking water)	○	○	○	○	○	○	○	○	○	○	○

Ecosystem services aligned with Sacyr's technology dependencies. The colors indicate the relevance of each ecosystem service in the different phases of the life cycle: ● new developments, ● operation, ● new developments and operation.

Nature impacts

Ecosystem service	Airport	Roads	Railway Work	Construction Site	Port Construction	Oil & Gas	Electricity Generation Plant	Waste Plant	Dams	Water Treatment	Urbanization
Cultivated terrestrial plants (including fungi and algae) for food	●	●	●	●	●	●	●	●	●	●	●
Animals raised for food	●	●	●	○	○	○	●	○	●	●	●
Screens and visual barriers	●	●	●	○	●	○	●	●	●	●	●
Control of erosion rates	●	●	●	●	●	●	●	●	●	●	●
Damping and attenuation of mass movement.	○	●	●	○	○	○	○	○	●	○	○
Regulation of the hydrological cycle and water flow (including flood control and coastal protection)	○	○	○	●	○	○	○	○	●	○	○
Fire protection	●	●	●	○	○	●	●	○	○	○	○
Pollination (gametes in the marine environment)	○	●	●	○	○	○	●	○	●	○	●
Seed dispersal	○	●	●	○	○	○	●	○	●	○	●
Maintenance of habitats and the gene pool	●	●	●	●	●	●	●	●	●	●	●
Pest control (including invasive species)	○	●	●	○	○	○	○	○	●	○	○

Ecosystem services aligned with Sacyr's technology dependencies. The colors indicate the relevance of each ecosystem service in the different phases of the life cycle: ● new developments, ● operation, ● new developments and operation.

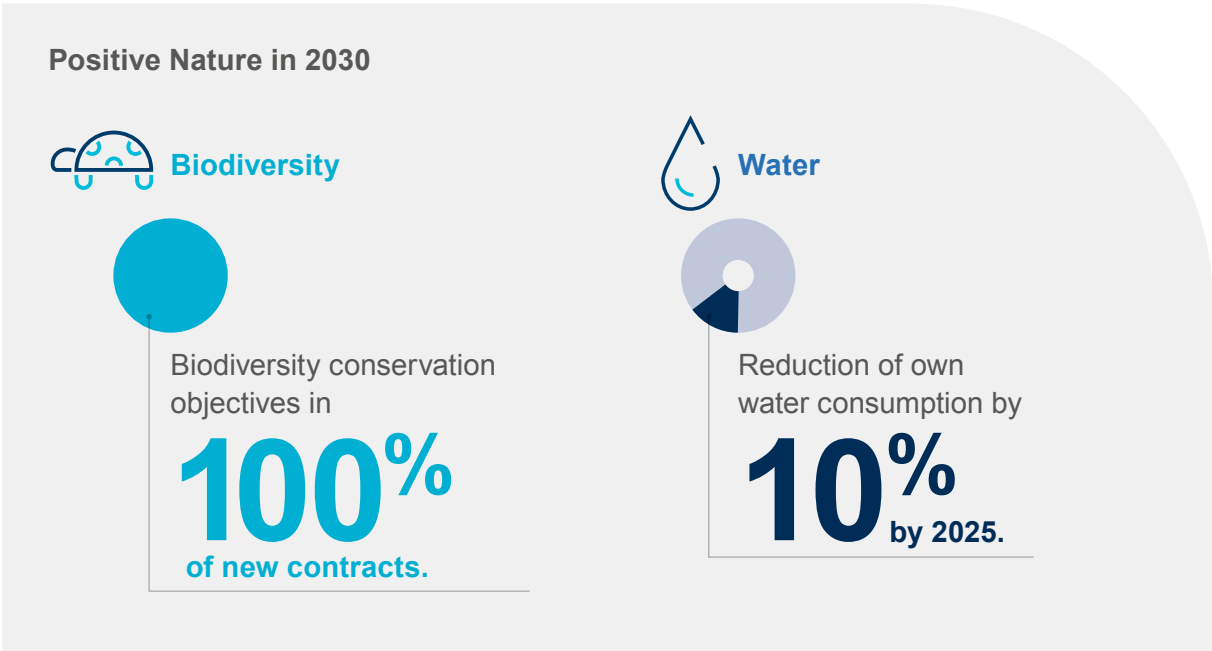
Ecosystem service	Airport	Roads	Railway Work	Construction Site	Port Construction	Oil & Gas	Electricity Generation Plant	Waste Plant	Dams	Water Treatment	Urbanization
Regulation of the chemical conditions of freshwater through processes regulated by living organisms	○	●	●	●	○	●	●	●	●	●	●
Regulation of the chemical composition of the atmosphere and oceans	●	●	●	●	○	○	●	○	○	●	●
Regulation of temperature and humidity, including ventilation and perspiration	○	●	●	●	○	●	●	○	●	○	●
Natural features or elements with existence value	●	●	●	●	●	●	●	●	●	●	●
Surface water for human consumption	○	○	○	○	○	○	○	○	●	○	○
Surface water for consumption (uses other than drinking water)	○	●	●	●	○	○	○	○	●	●	●
Surface water for energy production	○	○	○	○	○	○	○	○	○	○	○
Groundwater for human consumption	○	○	○	○	○	○	○	○	○	○	○
Groundwater for consumption (uses other than drinking water)	○	○	○	○	○	○	○	○	○	○	○

Ecosystem services aligned with Sacyr's technology dependencies. The colors indicate the relevance of each ecosystem service in the different phases of the life cycle: ● new developments, ● operation, ● new developments and operation.

In carrying out this analysis, ENCORE, a UNEP (United Nations Environment Programme) tool for visualizing impacts on natural capital, has been taken as a reference standard, and the duration of said impacts has been assessed, taking into account whether they are permanent or not and the magnitude of their consequences.

4.3 Metrics and objectives

To move towards a **Positive Nature in our activities in 2030**, aligning with the European strategy, we have defined objectives and performance metrics to pave the way in achieving this milestone.



We are Water Positive

The result of our 2021 water footprint determined that thanks to the desalination facilities managed by Sacyr Agua, the company has a very positive impact in areas with limited availability of fresh water. **In 2022 we have improved this result**, with an increase in the contribution of this resource compared to the previous year.

Thanks to this analysis we can determine that **Sacyr is Water Positive**, because our contribution of this resource in areas of marked water stress is greater than the global water footprint of our activities.

We have key performance metrics aligned with what is established in the initial guidelines for the definition of *Science-Based Targets for Nature*.

Ambit	Performance indicator	2020	2021	2022	2025
Generic	Activities certified in ISO 14001 (%)	75.23	80.35	82.04	90%
	Eligible Capex according to European Taxonomy (%)	-	84.70	87.90	100%
Soil (soil degradation)	Plantations (ud)	-	881,223	184,378	NA
	Soil erosion/ pollution/ecotoxicity/ soil carbon/ acidification/ eutrophication	-	-	*In calculation process.	*In calculation process.
	Restored and conserved area (ha)	6.71	788.26	1,384, 04	NA
Water (consumption and availability)	Own water consumption (m ³)	4,448,360	3,737,770	3,636,900	3,363,993
	Own water consumption in water stress areas (m ³)	3,931,280	3,294,200	3,167,340	2,964,780
Climate Change (GHG)	Scope 1 + 2 (t CO ₂ eq)	410,091.2	393,653.73	373,542.28	322,961.01
	Scope 3 (t CO ₂ eq)	3,714,204.05	2,996,279.37	1,953,607.03	2,879,092.48
Biodiversity	Affected species (no./M€). Including IUCN Red List and national and regional conservation listings	0.26	0.16	0.08	0.13
	Area of protected surface affected (ha/M€)	0.46	0.22	0.09	0.23

Our environmental evolution is reflected in the [Integrated Sustainability Report](#) of the company, which is published annually, which includes the main achievements and future objectives, showing the most relevant information on the management of our business model to respond to the expectations of our interest groups.

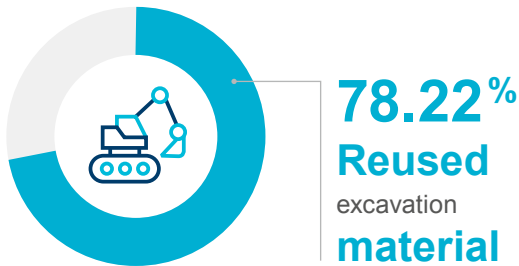
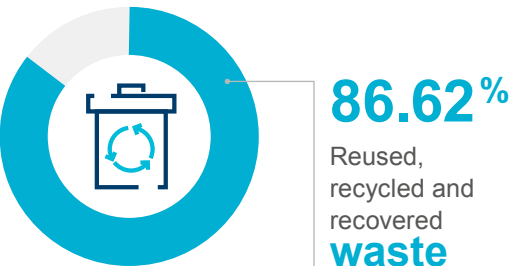
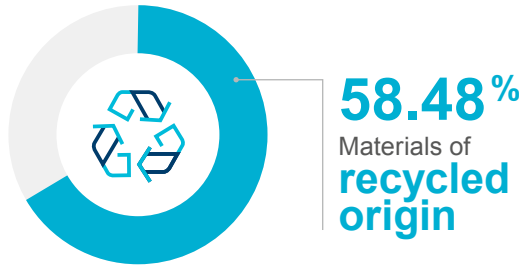
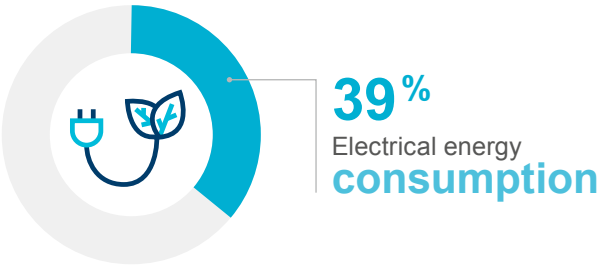
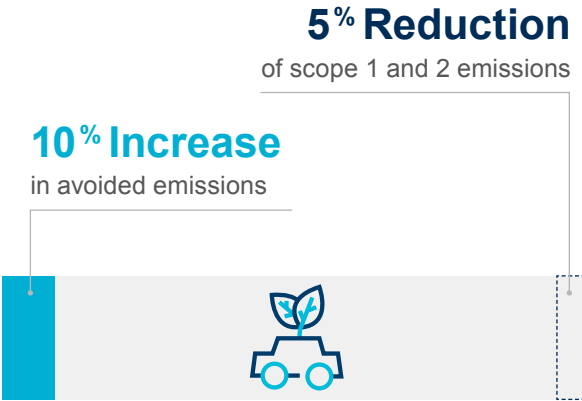
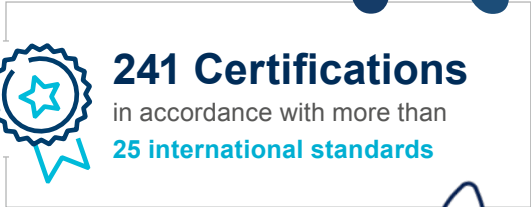
The indicators that we disclose annually in our Integrated Sustainability Report are based on those established in Law 11/2018 on Non-Financial Information and Diversity. The Report in turn follows the standard published by the *International Integrated Reporting Council (IIRC)*. In addition, it has been prepared in accordance with the *Global Reporting standard. Initiative (GRI)*, *identifying Sustainability indicators Accounting Standards Board (SASB)*, and the recommendations of the *Task Strength on Climate-Related Finance Disclosures (TCFD)*. Likewise, we have responded to the requirements derived from European Union Taxonomy Regulation 2020/852.

Regarding the performance of our natural capital strategy, we respond to the indicators: GRI 303: Effluents and waste 2018, GRI 304: Biodiversity 2016, GRI 305: Emissions 2016, GRI 306: Waste 2020 and GRI 308: Environmental evaluation of suppliers 2016. During 2024 we will begin collecting data to adapt the report and the metrics disclosed to the requirements established by EFRAG in the ESRS (*European Sustainability Reporting Standards*).

Our Integrated Sustainability Report represents our desire to **publicize the achievements achieved and future objectives.**



4.4 Our care of the environment in data



+36 Wildlife passages

in our projects



450 Protected species

809 ha Restored surface

+1M of plantings

in the last two years



570 ha Protected surface

3 New species

we have discovered



5,144 kg of seeds planted

835.70 t CO₂ eq Avoided

thanks to energy saving measures



857,403 m³ Of drinking water

that we have avoided collecting by prioritizing the use of regenerated water



14% Of water destined for agriculture

in areas of water scarcity



+46 Conservation plans



*Data closing 2022.

5. Water



5 | Water

5.1 Initiatives in water management

Guaranteeing the quality and supply of water is essential to not put this resource at risk. Global warming, desertification and anthropogenic pollution are phenomena that directly affect the availability of water, which is why it is essential to manage water resources efficiently.

In our commitment to promoting sustainability in everything we do, we carry out a multitude of actions that help us continue moving forward, reducing the impacts on this resource.

5.1.1 Efficiency in water use

The **Life project HyReward** uses brine from the reverse osmosis process in seawater desalination as a high-salinity feed stream and treated wastewater as a low-salinity stream. The union of the two through reversible electrodialysis (RED) enables the **conversion of electrochemical energy into electrical energy, thereby generating renewable blue energy.** life Hyreward (LIFE20 CCA/ES/001783) is funded by the European LIFE programme. The project began on November 1, 2021, has a duration of three and a half years and a budget of 2.2 million euros and has the collaboration of the Dutch sister companies REDstack and Pure Water Group.



Desalination plants: A sustainable solution for the supply of drinking water

Project	Binningup Desalination Plant.
Location	Perth, Australia.
Description	Southern Seawater Desalination Plant (SSDP): example of efficiency and sustainability

The desalination plant has a current production of 175,259 m³ /day and whose design, construction and operation reached 1,100 million euros. This plant has low energy consumption, with values less than 4.05 Kw -h/m³, and 81% of the energy consumption comes from renewable sources. The marine works were non-invasive and were carried out by microtunneling, in order not to affect the protected dune system.



Project	EMMASA (Mixed Water Company).
Location	Santa Cruz de Tenerife, Spain.
Description	EMMASA: an efficient model to prevent water scarcity

Through the Seawater Desalination Station (EDAM), 28,800 m³ of water/day is desalinated, equivalent to filling about 12 Olympic swimming pools. To capture the seawater, there are thirteen drilled wells, 36 meters deep, in the area closest to the coast, where thirteen submersible pumps extract seawater and send it to the filtration. Strict environmental protocols are followed that guarantee its correct operation and management.



Until the last drop: Network performance improvement plan in Chile

Project	Network Performance Improvement Plan 2021-2030.
Location	Chile.
Description	Established a network performance improvement plan that involves investments in comprehensive network management projects that include: network sectorization, pressure management through regulating valves, detection and repair of leaks, installation of flowmeters in ponds and change of counters. Considering these actions, network losses will be reduced to almost 7%, which will mean a saving of 1.4 million m ³ of fresh water.

We take care of the water in Devimar

Project	Highway to the Sea.
Location	Colombia.
Description	We carry out a project to care for water resources in the rural area of the municipality of Ebéjico and in the San Sebastián de Palmitas district. Both the formulation and execution of the project were led by community leaders, who went through training phases and received technical support. The work allowed the protection of three water sources and the planting of more than 1,780 species of native trees and the awareness of 1,650 people in 47 workshops.

Tele reading project to avoid leaks

Project	Comprehensive water cycle in Sotogrande.
Location	Cádiz, Spain.
Description	We launched a project of remote reading meters connected to the communications network. This system provides relevant information such as the recording of consumption within the selected sectors, real-time event alarms (abnormal consumption, flow directions, etc.) as well as detecting incidents, such as leaks and breaks.

5.1.2 We reuse water

We have launched a research project “**SUSTAINABILITY, WATER AND AGRICULTURE IN THE 21ST CENTURY, SOS-AGUA-XXI**”, led by Sacyr Agua, approved by the CDTI and supported by the Ministry of Science and Innovation. The objective of SOS AGUA-XXI is to find **solutions sustainable and energy efficient technological solutions to develop resource management and treatment strategies**, preparing the Spanish agricultural sector to combat the scarcity of conventional water resources and the effects of climate change.

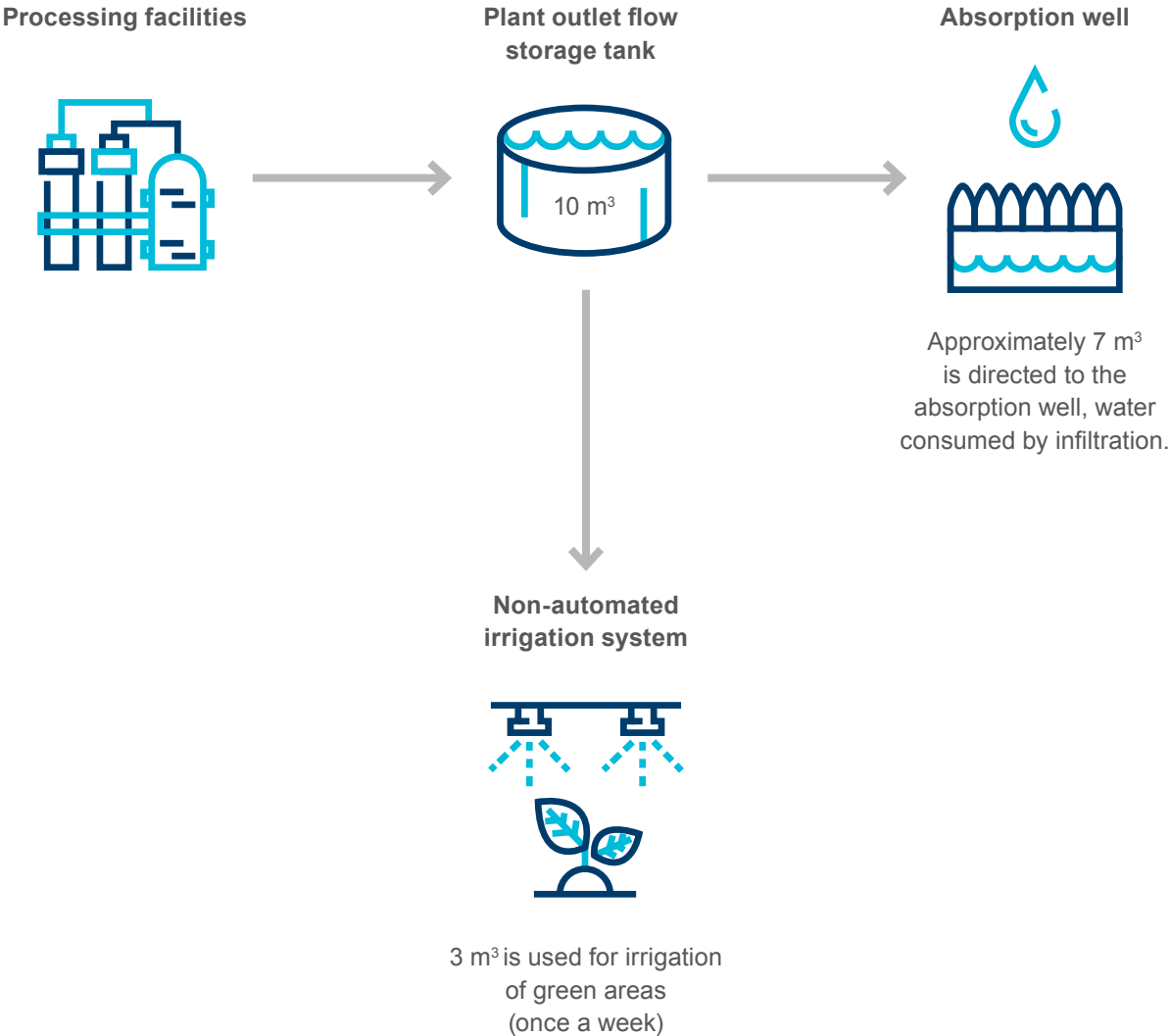
SOS Agua XXI project

The **SOS Agua XXI project** is made up of four main lines of research:

1. Digitization and incorporation of new technologies.
2. Different alternatives to improve water quality for agriculture.
3. Research into solutions for the recovery of by-products from desalination brines: Brine Mining.
4. Economic study of all the technologies and solutions studied throughout the project.

We generate water for irrigation in Chile

Project	Highway Algarrobo Route.
Location	Chile.
Description	The implementation of this project improves and modernizes the current treatment system through the implementation of two wastewater treatment plants with a 10 m ³ storage pond that is filled and emptied once a week. Therefore, between both plants, 80 m ³ are released per month. These treatment plants reuse water, dividing the output flow into two parts, 70% will be used for infiltration through an absorbent well and the other 30% for irrigation in accordance with the provisions of current regulations.



The many lives of water

Project	Yecla WWTP and Jumilla WWTP.
Location	Murcia, Spain.
Description	In these wastewater treatment plants, more than 3,700,000 m ³ /year of water is regenerated and destined for agricultural use. The flow contributed by both treatment plants represents between 30 and 50% of the total flow used by the Irrigation Communities. The water used in this area comes mostly from wells, avoiding the collection of groundwater and thus expanding arable land. Furthermore, the regenerated water from these treatment plants has a high content of phosphorus and potassium and is low in nitrogen, which makes it ideal for use in soils and crops.



Jumilla wastewater treatment plant

Yecla wastewater treatment plant



5.1.3 We prevent pollution

We exceed objectives by improving water quality

Project	Emergency galleries in the Pajares Tunnel.
Location	Asturias, Spain.
Description	Throughout the project, three treatment plants were installed to treat the water that comes out during the excavation of the tunnels' emergency galleries. The contract established the objective of Reducing the water discharge parameter "suspended solids", in order to improve the quality of the discharge in 2022. The contract reduced the amount of suspended solids in the water discharges to 18 mg/l, with which the objective was achieved 100%, even improving the quality requirements of water discharges established by the Cantabrian Hydrographic Confederation (CHC).

We avoid suspended solids in a protected basin

Project	UTE Elorrio.
Location	Vizcaya, Spain.
Description	The access road to this work is through a local road, so it must always be kept clean to facilitate access for neighbors. The cleaning of this is carried out with sweepers and with continuous irrigation that generates a large amount of water that drags the solids from the road to a protected basin. In order to reduce the amount of suspended solids in the area's runoff water and protect the basin, a treatment plant has been installed that performs decantation that separates the suspended solids from the water in situ.



Image of the construction process of the UTE Elorrio project in Vizcaya.

6. Biodiversity



6 | Biodiversity

6.1 Initiatives in the protection of biodiversity

The natural environment is a priority in the projects we develop, therefore, we carry out actions that aim to conserve the existing flora and fauna and improve the populations of species and their habitats, as well as compensate for environmental alterations caused by our activities.

We carry out actions that aim to **conserve the existing flora and fauna and improve the populations of species and their habitats**



6.1.1. Fauna

We built a home for the lesser kestren

Project	UTE Embalse de Almodévar.
Location	Almodévar, Huesca and Vicién in Aragon, Spain.
Description	We built a reservoir with a capacity of 169.71 cubic hectometers with two dams that will flood more than 1,152 hectares. In this work, a building (primillar) has been built with the aim of housing and promoting the breeding of lesser kestrels (<i>Falco naumanni</i>), a bird that is within the Aragonese Catalog of Endangered Species, and that with the construction of the reservoir can be seen affected its habitat. To determine the occupancy of the nests and the productivity of lesser kestrel pairs, monitoring objectives have been established. This building can accommodate a total of 25 breeding pairs.



We save young storks

Project	UTE AVE Plasencia Peñas Blancas.
Location	Cáceres, Spain.
Description	<p>This work, of which Sacyr Neopul is a part, consists of the electrification of the railway line. In it, we carried out the removal of white stork nests (<i>Zirconia zirconia</i>) installed on various poles of the catenary of the Plasencia-Peñas Blancas Bifurcation section of the Madrid – Extremadura High Speed Line. This species is included in the Regional Catalog of Endangered Species of Extremadura, in the category “Of Special Interest”. In order to conserve the Natural Heritage and Biodiversity of the area, the following initiatives have been carried out:</p> <ul style="list-style-type: none"> ▮ Collaboration with ADIF Alta Velocity in the request for nest removal. ▮ Collection of eggs and deposit of young storks in an incubator provided by the Fauna Recovery and Environmental Education Center “Los Hornos” of Cáceres. The custody of the young storks and the eggs was carried out by the Environmental Agents and they were delivered to the “Los Hornos” Recovery Center. ▮ Dismantling of nests. ▮ Installation of anti- nest umbrella with rounded tip.



We protect and relocate the families of the Biobío river

Project	Construction of New Biobío Railway Bridge.
Location	Province of Concepción in the Biobío Region, Chile.
Description	<p>This project consists of replacing the existing bridge due to its technical obsolescence, which dates back 130 years. Within the framework of the project’s voluntary commitments, a rescue and relocation plan for fish fauna was proposed as a management measure for native aquatic fauna. This action avoids possible negative effects on aquatic species in the sectors of direct intervention of the project.</p> <p>A total of 15 native specimens were captured, categorized as “Endangered” (<i>Percilia irwini</i>); “Vulnerable” (<i>Cheirodon galusdae</i> and <i>Trichomycterus areolatus</i>) and “Least Concern” (<i>Percichthys trout</i>) according to the IUCN Red List.</p> <p>All these findings have been shared with the children of the area, through a coloring book with the fauna of their region.</p>



The rocket frog, our favorite singer

Project	Rumichaca-Pasto (Unión del Sur Road Concessionaire).
Location	Department of Nariño, Colombia.
Description	<p>We carry out actions to improve and conserve the region's wildlife, specifically through two species of amphibians: Rocket Frog (<i>Hyloxalus sp</i>) and Blue-thighed Marsupial Frog (<i>Gastrotheca argenteovirens</i>).</p> <p>These two frogs were selected as species to be protected due to their high relationship to bodies of water, their endemic nature, morphology and charismatic behavior defined by vocalizations and songs, easily recognized by the communities related to the road project.</p> <p>Do you want to hear the song of the Rocket Frog?</p>



We safeguard our fauna

Project	New Velindre Cancer Center.
Location	Cardiff, Wales, United Kingdom.
Description	Reptile mitigation and management strategy.

Due to the possible presence of reptiles in the area of action and in accordance with the “ Reptile Management Strategy ” a reptile fence was installed to prevent their entry into the construction site. Subsequently, daily inspections were carried out at the work, in the event that a reptile was captured, it would be relocated to the inhabited areas for its correct development. The process of capturing reptiles is based on the installation of plates on the grass that when the sun hits them increase their temperature, the reptiles go to these plates where they are more comfortable. When inspections are carried out, the plates are examined and the reptiles are captured.

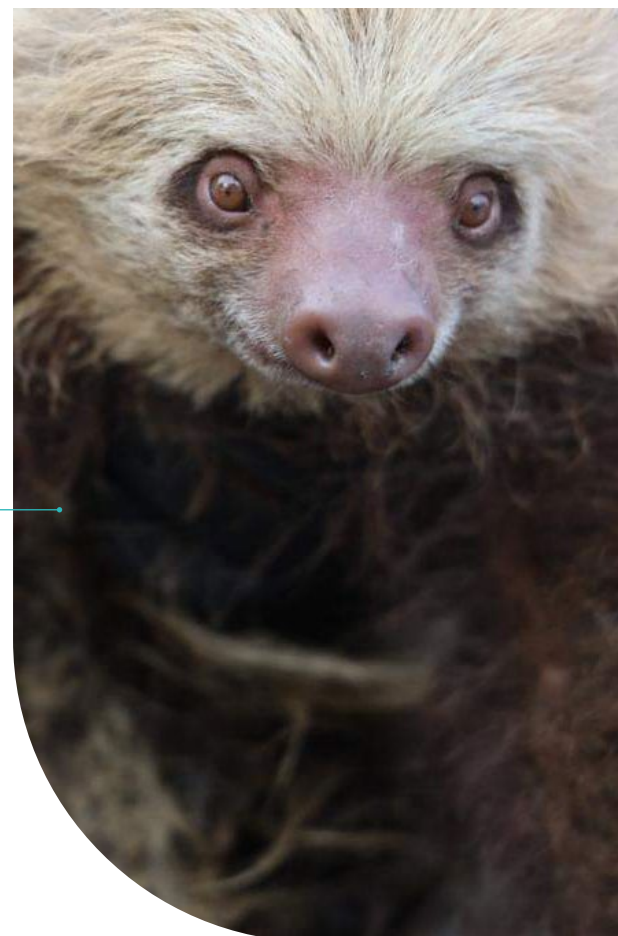


Project	Construction of New Biobío Railway Bridge.
Location	Province of Concepción in the Biobío Region, Chile.
Description	Controlled Disturbance Plan.

The project has a Controlled Disturbance Plan as a protection measure to avoid possible negative effects on low-mobility wildlife species, specifically reptile species of the Order Squamata, and that inhabit certain areas to be intervened within the area where it will be developed. the project. The blue-bellied lizard (*Liolaemus*) was recorded in person or considered potentially present in the area. cyanogaster), the lemniscata lizard (*L. lemniscatus*), the weeping lizard (*L. chiliensis*), the slender lizard (*L. tenuis*), the Schroeder's lizard (*L. schroederi*), and the long-tailed snakes (*Philodryas chamissonis*) and short-tailed (*Tachymenis chilensis*), which are relatively common in central Chile.

Project	Dealership Pacific Road Union Road.
Location	Buga, Colombia.
Description	Wildlife rescue: sloth bear.

An emergency call was received to the 24-hour hotline reporting that a sloth (*Choloepus hoffmanni*) or also called the two-toed sloth or grayish sloth, which is in a state of vulnerability, was located near the Yotoco Reserve, in the area of influence of the project.). Our environmental management team transported the sloth to the San Emigdio Environmental Education Center, who performed a checkup and received veterinary care. Sloths are of great ecological importance since they constitute the largest proportion of the biomass of the tropical humid forest.



Project	Dealership South Union Road.
Location	Nariño, Colombia.
Description	Two new records of dung beetles.

Hybosorinae and *Scarabeinae* beetles (*Coleoptera: Scarabaeidae*) are presented for Colombia. The discovery is part of wildlife monitoring in the environmental compensation areas of the road corridor. This finding has been important because this beetle, commonly called dunghill, is a bioindicator in the different areas in which compensations have been made.

Project	Algarve and Évora railway lines.
Location	Portugal.
Description	Wildlife monitoring and tracking plan.

In the Linha Algarve project, a monitoring plan for ecological systems is carried out. Monitoring focuses on aquatic birds, especially in areas with plant communities and marshes that surround the railway line.

The Linha de Évora project has a general fauna monitoring plan that includes two more specific plans:

- Monitoring plan for the spatio-temporal monitoring of the communities of little bustard, hunting eagle, Bonelli's eagle, black stork, eagle owl, bats and amphibians.
- Monitoring plan for wildlife mitigation measures applied to the project.



Project	RSC-287 Highway managed by Sacyr Concesiones (Rota de Santa María).
Location	Rodovia, Brazil.
Description	Wildlife scaring measures.

On the RSC-287 highway, during the execution of the works, the removal and rescue of wildlife is carried out, especially groups of herpetofauna (amphibians and reptiles), mastofauna, birds, ichthyofauna and bee hives.

Teams made up of biologists are dedicated to scaring off fauna, in the areas prior to the start of daily work activities, with the aim of suppressing vegetation. With this method, wildlife is taken to safe areas that are not subject to future changes in the same project.

In this phase, in addition to scaring away, mirror techniques are carried out to identify active or already inactive nests, active searches with binoculars, herpetological hook and/or flashlight, inspection of stones, logs, burrows, promoting various intentional sound disturbances with the aim of scaring to the fauna present in the area.

Amphibians, reptiles and small mammals in general have little mobility and greater difficulty voluntarily leaving the intervention areas. Therefore, all individuals found during the removals are captured and then relocated.





Project	Various.
Location	Spain.
Description	Protection and monitoring of fauna.

In the **Punta Langosteira railway access works** (A Coruña), in the **Palencia Norte-Amusco AVE** (Palencia), UTE Elorrio (Vizcaya) biological stops have been carried out to respect the reproduction periods of the species, as well as surveys of avifauna.

At the Granadilla sanitation work (Tenerife), surveys are carried out to locate specimens of pimelia (*Pimelia canariensis*) and a protective barrier was built to prevent pimelia access to the project area.

At the **UTE Tijarafe project** (La Palma), search and transfer campaigns for salamander individuals (*Tarentola delalandii*) and in the **UTE Presa Mularroya** (Aragón) identification campaigns are carried out for beaver, otter and American mink, as well as birdlife in the tunnel exit area in the Jalón River area.

At the Hernani-Astigarraga UTE project (Basque Country) a semi-annual wildlife monitoring is carried out, physical protections have been installed (fences, meshes, barriers for water filtration (straw bales) in order to affect the least possible biodiversity in the area., water quality and noise control monthly to analyze the indirect effects caused, before carrying out any clearing, an inspection of the area is carried out by a technician competent in fauna matters, felling and clearing are carried out outside the reproductive periods of the amphibians, reptiles, birds and mammals of the environment (March to July).

In the **UTE Armuña project** (Castilla y León) during the years 2020, 2021 and 2022, the bird communities in the area have been monitored by carrying out scheduled censuses for each species.

We avoid light pollution thanks to vegetable curtains

Project	RSC-287 Highway managed by Sacyr Concesiones (Rota de Santa María).
Location	Rodovia, Brazil.
Description	Light pollution has adverse effects on birds, artificial night light can affect the migratory calendar and other seasonal behaviors by altering biological clocks, which is why we have implemented plant curtains composed of shrubs (<i>Murraya paniculata</i>) and trees (<i>Cupressus lusitánica</i>).

Friends of pollinators, without them there is no life!

Bees play a key role in providing ecosystem services. According to IPBES, the western bee is the most widespread pollinator worldwide, and more than 80 million hives produce about 1.6 million tons of honey per year. Pollinators directly contribute to food security by allowing plants and food crops to reproduce. According to bee experts at the Food and Agriculture Organization of the United Nations (FAO), [one third of global food production depends on bees](#).

Local declines in insect populations such as wild bees have been frequently reported, and insect abundance in some locations has declined rapidly even without large-scale changes in land use, but the extent is unknown. world of this decline.



For this reason, Sacyr carries out actions to help preserve bees and other pollinators that are threatened by pesticides and air pollution:

- ▮ In the construction of the **Amazon Logistics Warehouse in Badajoz** (Spain), habitats for birds and insects have been arranged in the most suitable places on the ship's site (nests, insect hotels and feeders).
- ▮ **Belfast Transport site Hub** (United Kingdom) flower beds have been planted in the garden areas incorporating at least 50% of native and perennial species favorable to pollinators.
- ▮ On the **RSC-287 Highway** managed by Sacyr Concesiones (Rota de Santa María, Brazil), the rescue of bees native to the area has been carried out.
- ▮ In the **Route 2 rehabilitation and expansion project** (Paraguay), a landscape restoration will be carried out in areas near the maintenance warehouses of the work to promote native fauna and flora, specifically for endangered species such as the hummingbird., jatei (native honey bee) and birds in general. Appropriate native forest and ornamental species have been used. A friendly space has been created with local biodiversity, increasing the interaction of pollinators by 30% and reducing water use by 90%.



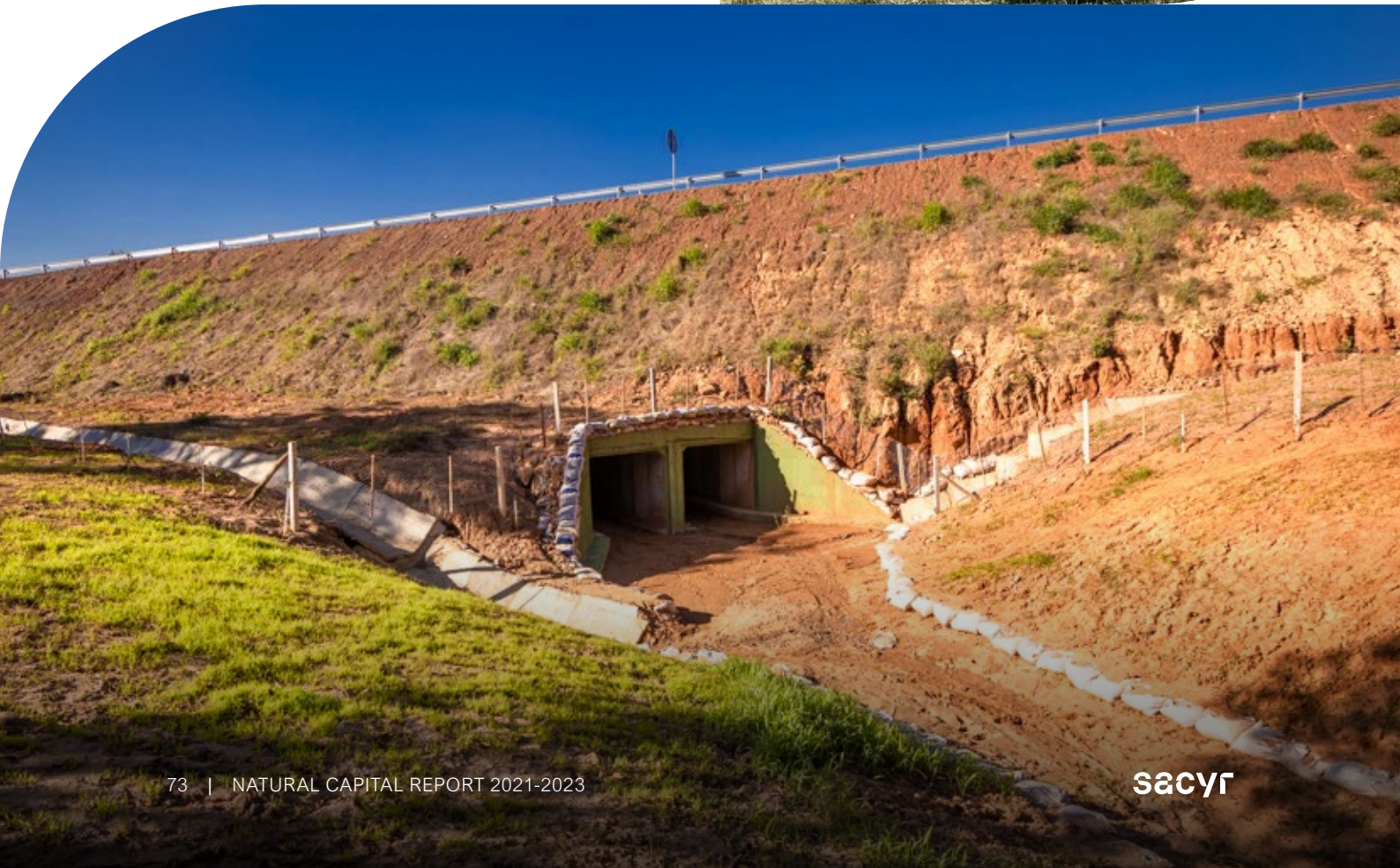
Living highways: linking ecosystems for wildlife

We build wildlife crossings (also known as green bridges or ecoducts) on some of our highways. These passes are safe paths for animals to cross, reducing wildlife abuse and allowing the ecological connectivity of different habitats.

- ▮ On the **Al Mar 1 Highway** in Colombia, we built 16 wildlife crossings. These are 5 elevated wildlife passes for animals such as night monkeys, squirrels, honey bears, iguanas, among others. As well as, 11 underground wildlife passages for fox dogs, ocelots, opossums, wild dogs, among other species. The interventions include a perimeter fence in each of the places, which allows the animals to be taken to the wildlife crossings and prevents them from entering the road, as well as signs with information on the different species that pass

through the corridor. To demonstrate the effectiveness and use of the passes, we carry out monitoring, and we also have camera traps at the wildlife passes.

- In Northern Ireland, as part of the **A-6 motorway project requirements Drumahoe to Dungiven Dualling**, 18 wildlife crossings have been installed specifically for badgers and otters. The location of the mammal crossings was determined through ecological surveys and agreed with the Northern Ireland Environment Agency (NIEA). In addition, 26 km of badger fencing and 11 km of otter fencing have been installed throughout the project.
- **On Routes 2 and 7 in Paraguay**, sewer adaptations were carried out to form them as wildlife crossings. Organic soil was dispersed on the slopes of the embankments and the margins of the water channel, the slopes were planted and an enclosure was made to guide species towards these fauna passages.



6.1.2 Flora

¡Discovery of new species!

Project	Rumichaca – Pasto road.
Location	Department of Nariño, Colombia.
Description	Two new types of orchids have been discovered, thanks to the process of environmental compensation through conservation activities of protected species (a conservation measure that prevents native species from being harvested) carried out in the project. The new orchid species are: <i>Epidendrum narinense</i> and <i>Epidendrum guaitaranum</i> – named in honor of the southwestern region of Colombia. To help preserve them, the land is cleaned, adaptive management measures are implemented and species are labeled using stakes and signs.



Project	Australian desalination plant.
Location	Binningup, Australia.
Description	An unidentified species of Acacia was identified at the Australian desalination plant facilities. This is the <i>Acacia sp. Binningup</i> . Since its discovery, seeds have been collected to propagate them and be able to plant more acacias of this species in our revegetation areas.

<https://www.watercorporation.com.au/About-us/Media-releases/2018/October-2018/Discovery-of-new-Acacia-species-at-Southern-Seawater-Desalination-Plant>

The publication of these two new species for science is available on the AMO Herbarium website ([https://herbarioamo.org/index_archivos/Fascicle19\(1\).pdf](https://herbarioamo.org/index_archivos/Fascicle19(1).pdf)), in fascicle 19(1), pages 1913 and 1927. *Epidendrum nariñense* is in Danger, because its main coverage area is only 5,000 km².

Roots in motion: Transplantations of plant species

- At the **Tijarafe UTE project** (Spain), search and transplantation of *Aeonium nobile* individuals was carried out (red bejeque), which had previously been inventoried on the side of the LP-1 highway near the limit of the El Jorado Protected Natural Area. The specimens of this species have been extracted from their place with the greatest of care, ensuring that the plant suffers as little as possible and trying to remove its almost complete root.
- At the **Los Arejos -Níjar AVE project** (Spain) we carry out translocation work for *Teucrium charidemi* specimens affected by the layout. It was extracted, potted and transported from the works to a nursery. One month after their translocation, practically all of the individuals managed to grasp, and the development of new leaves could also be seen. Once the grip was achieved, the plant was moved outside, but within the nursery facilities to adapt to the conditions it will have in its final destination. Once in the nursery,



43,760 *Teucrium charidemi* were translocated in two different locations, in the layout of the work and at the mouth of the false tunnel.

- ▮ During the work carried out for the layout of the **Route 66 Concession – Camino de la Fruta (Chile)**, we found in the San Vicente slope sector a sector with the presence of *Cryptocarya alba* (Peumo), which according to the Red Book of the Terrestrial Flora of Chile was a vulnerable species, where it is one of the dominant species in the sclerophyllous forest. In the study area, 24 Peumo individuals were found that will be indirectly affected by the project, for which it was decided to make a 1:5 compensation from Peumo seeds and cuttings, that is, for each individual registered within the study area. In the study, 5 will be planted, so the total compensation, given that no individuals were found to transplant, will be 120 individuals relocated from Peumos seeds and cuttings.

Nurseries and orchards

- ▮ **Clean Area** contract (Colombia) and in the **Routes 2 and 7 project** (Paraguay), compost bins have been built with recycled materials intended to reuse the plant waste generated. In this way, the generation of waste was avoided.
- ▮ At the **Vial Montes de María Concessionaire** (Colombia), a nursery has been created, called “El Camarón”, to propagate native and threatened species with the aim of contributing to conservation and restoration projects of the tropical dry forest, the 35,000 trees used in the ecological restoration in the Los Colorados Flora and Fauna Sanctuary come from this nursery.
- ▮ At the **ISSSTE General Hospital in Tláhuac (COHRSUR)** (Mexico) we make a garden of aromatic plants such as lavender, basil, parsley, epazote, cilantro and chives.



From abandoned park to green oasis: how we transform princesa leonor park

Project	Restoration of the Princesa Leonor Park.
Location	Valdebebas, Madrid, Spain.
Description	<p>We recover the landscape wealth, launching a restoration project that will bring the rural world closer to the urban population, a project developed by the Valdebebas Compensation Board together with Sacyr Engineering and Infrastructure. The proposal consisted of recovering natural processes and ecosystem services, responding to the specific conditions of the place and promoting biological and cultural diversity, through <i>Nature-Based Solutions</i>.</p> <p>https://www.sacyr.com/en/-/de-parque-abandonado-a-oasis-verde-como-transformamos-el-parque-princesa-leonor</p>



6.1.3 Habitats

Reborn of an ecosystem: we recover the magdalena river basin

Project	Recovery of the degraded ecosystems of the Canal del Dique.
Location	Colombian Caribbean Region. Departments of Atlántico, Bolívar and Sucre, Colombia.
Description	For the execution of this public-private initiative between the National Infrastructure Agency of Colombia (ANI) and Sacyr Concesiones, the concessionaire Ecosistemas del Dique has been created. The execution of these works involves the construction of two complexes of locks and gates: one in Calamar and another in Puerto Badel. This infrastructure will allow the control of water flow and saline intrusion, it will also mitigate shore erosion and reduce the entry of sedimentation into the bays of Cartagena and Barbacoas, among other results. All of these interventions, 36 in total and at specific points, will help restore degraded ecosystems.

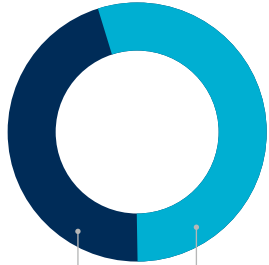
Data:



The concession term is 15 years and is divided into three stages:



It covers an area of influence of 435,101 hectares



196,824 ha
terrestrial

238,227 ha
marine

It will benefit a population

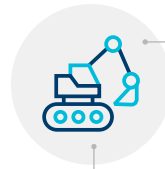


+1.5M
inhabitants

+19 municipalities
in the departments of Atlántico,
Bolívar and Sucre.



The Canal del Dique
has a total length of
115 kilometers



36 works
in total

Main works:
2 complexes/locks

Total investment
3.2 billion pesos
(approximately 640 million euros)



Approximate social
investment of
340 billion pesos
(around 70 million euros)

60,000 jobs
direct and indirect



2028
Year of completion
of construction and
start of flood control

<https://www.youtube.com/watch?v=U0hZIKETr2k>



At the end of the construction phase of the project, which is estimated for 2028, it is expected to obtain a balance of the main environmental conditions (ecosystem, social and economic) of the Canal del Dique, which will positively impact the construction of adaptation scenarios to climate change.

The project consists of a socio-environmental action.

The **environmental objectives** to be achieved with this project are the following:

- 1** | Active regulation of flow entry into the Canal del Dique system
- 2** | Control of sediment transit between the canal and the Cartagena and Barbacoas bays
- 3** | Flood control and water levels in the canal
- 4** | Scenarios for adaptation to climate change
- 5** | Control of salt intrusion
- 6** | Improving swamp-swamp and swamp-canal connections
- 7** | Securing the canal's water resources for drinking water and other services
- 8** | Restoration of the ecosystems of the Corales del Rosario and San Bernardo National Natural Park
- 9** | Restoration of rounds of swamps, pipes and Canal del Dique
- 10** | Maintenance of river navigation

The **social objectives** of the project consist of an approximate social investment of around 70 million euros, resources that will improve the quality of life of the communities surrounding the Canal del Dique, which will be used in:

- 1 | Employment generation.
- 2 | Community strengthening training.
- 3 | Contributions for productive projects.
- 4 | Environmental educational processes.
- 5 | Development of community infrastructure.
- 6 | Maintenance of dikes and access roads.
- 7 | Maintenance of navigability through dredging.
- 8 | Support for the requirements of the JEP (Special Jurisdiction for Peace)

The recovery of the degraded ecosystems of the Canal del Dique is a unique project in Colombia and Latin America in terms of sustainability, because it is tailored to the needs of the Canal del Dique, the territory and its communities. The Colombian Government and Dique Ecosystems work for the development of the Caribbean region and the well-being of its inhabitants.



Back to the origins: We recover the outer port of langosteira

Project	G50 Pipeline Unloading crude oil at Langosteira Outer Port.
Location	A Coruña, Spain.
Description	We preserve the surroundings of the civil works of the original pipeline thanks to restoration actions, such as the restitution of vegetation and the burying of the route. The main recovery and environmental restoration, in addition to the morphological restitution of the route, corresponds to the section of work that affects the Rego Suevos before its imminent mouth into the sea. As well as, the control and elimination of <i>Cortaderia Selloana</i> , an invasive plant widespread in the area in which the project is framed. In addition to mitigating the effects of the works on the flora and fauna of the environment during their execution.



An island restored in the Santa Lucía river

Project	Central railway works on the August 25 bridge.
Location	Department of Florida, Uruguay.
Description	The Santa Lucía River basin has temporary and fixed islands along its route depending on the water level. In this case, we are working on a fixed island, with incipient vegetation, affected by the railway works. The restoration of this island consists of recovering the ecological structure of the ecosystem where we operate. 65 individuals were planted, with their corresponding tutors, in addition to the reintroduction of seedlings recovered from the undergrowth, respecting the biodiversity of the region.



Clean water in La Cocha Lagoon

Project	Unión del Sur road concessionaire.
Location	Laguna de la Cocha, municipality of Pasto, in the department of Nariño, Colombia.
Description	We carry out a socio-environmental underwater cleaning campaign of Laguna de la Cocha using certified divers, which includes a sustainability component focused on comprehensive waste management and a component that promotes community and sustainable tourism. This cleaning was carried out in areas previously studied and prioritized due to their high content of contaminating elements and with the adaptation of the methodology of the Dive Against program. Debris from Project AWARE (PADI Foundation).



October – 2019



3 days



32 divers



626 kg of waste recovered



23 public and private entities



[Documentary](#)



November – 2021



31 days



40 divers



1176.2
kg RS
recovered



31 public
and private
entities



[Documentary](#)

weaving green life

Project	Pamplona – Cúcuta Dual Carriageway.
Location	North of Santander (Colombia).
Description	During the execution of the construction processes (embankments, slopes and access roads) of the project, it is inevitable to affect the vegetation cover and its regeneration potential in the intervened areas. To minimize this situation, the use of two forage species is carried out. and perennials present in the area, kikuyu grass (<i>Pennisetum clandestinum</i>) and African stargrass (<i>Cyndon nlemfuensis</i>), by planting its horizontal stems (stolons). The stolons allow the recovery of the intervened areas and, in turn, mitigate the visual and landscape impact caused. We recovered 21 hectares with runners thanks to their easy adaptation, tolerance to low temperatures, resistance to drought, rapid development, minimal maintenance and establishment in soils devoid of vegetation.



Sewing life in our projects

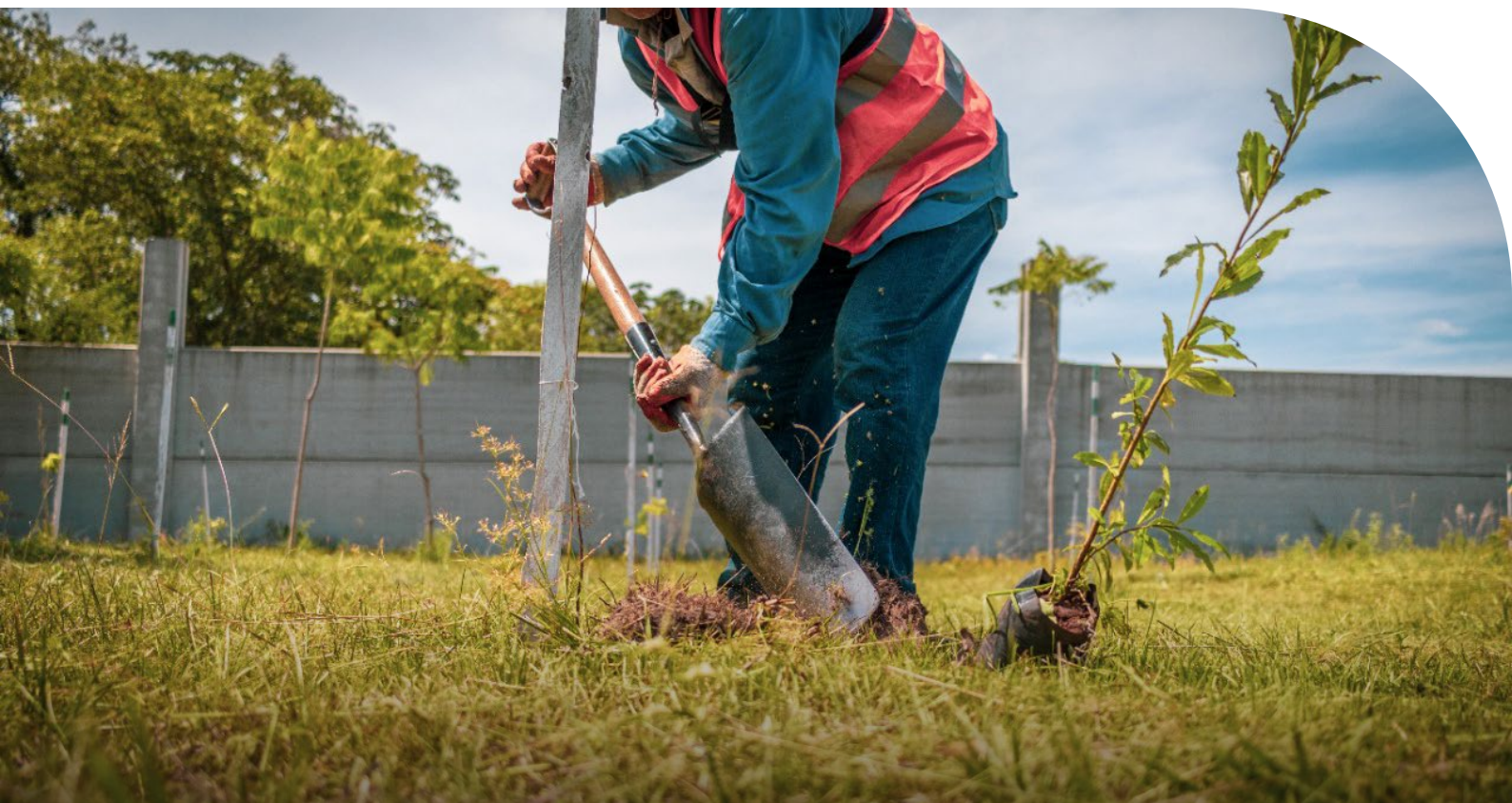
We carry out various reforestation actions consisting of forest compensations, landscape restorations, hydroseeding... In the last two years we have carried out more than one million plantings.

- ▮ In the **Routes 2 and 7 project (Paraguay)**, we carried out forest compensation for the trees affected by the works in the city of Piribebuy. A total of 1,017 seedlings were planted. The main species are lapacho, yvyrapyta, Guayaibi, Petereby, Kurupa'y, among others.

We also carried out forest compensation in the City of Eusebio Ayala, a total of 5,997 seedlings of native species were planted distributed in 15 compensation sites designated by the municipality.

And, in the district of Caacupé, 28,014 seedlings of native species were planted in strategic planting sites such as squares, schools, green areas and others. Among the native tree species planted are: Yvapovo, Yvyra pyta, Cedro, Tajy, Peterevy, Urunde'y, Laurel, Inga creek, Guajaibi, Kurupa'y, among other timber and fruit species. Planting was carried out at 47 sites and educational posters have been installed at strategically selected sites. The educational posters include illustrative images of the main species planted and a description of the reason why the plantations are carried out.

In the last two years we have carried out more than one million plantings.



- On the **A6 Drumahoe project to Dungiven Dualling (United Kingdom)** we have developed landscape and environmental works to mitigate the impact of the project. 760,000 plants have been planted along the entire length of the project (25.5 km). The planting is designed to protect the existing landscape character, provide adequate protection for residential receptors and integrate the infrastructure into the surrounding landscape.
- **UTE Armuña (Spain) work** has consisted of the transformation of the agricultural ecosystem from rainfed to irrigated, the restoration of the affected areas of the forest ecosystem that coexists with the agricultural ecosystem has been carried out. To achieve this, 684 holm oaks, 1,000 poplars, 1,000 ash trees, 1,000 willows and 20 elms have been planted, and nest boxes have been placed.



Planting carried out around the A6 Drumahoe to Dungiven Dualling project (United Kingdom) to mitigate its impact.

Intervention carried out in the UTE Armuña project (Spain) to transform the ecosystem from rainfed to irrigated agriculture.

- On the **Rumichaca-Pasto Double Road project (Colombia)** we installed 406,800 m² of coconut fiber biomantle, improving soil permeability and favoring the growth and development of vegetation on the slopes. This installation has been carried out on the slopes where its application was feasible, thus allowing revegetation, protection and surface stabilization, avoiding its deterioration due to erosive processes.
- To commemorate Earth Day, celebrated on April 22, our environmental team from **Autopista al Mar 1 (Colombia)** visited La Volcana school, located in the San Sebastián de Palmitas district, where we planted 20 trees of different species. During the day we also took the opportunity to raise awareness among children and the community about the importance of caring for and preserving the area's ecosystems, which are rich in fauna and flora. The children were happy to participate in this planting of different species such as guayacán, chachafruto, chirimoyo, poma, chagualo and aguacatillo.
- In **Camino de la Fruta (Chile)**, one of the most important actions we have carried out at the flora level is a reforestation of 25 ha with native species. The species used in the plantation are Quillay, Maitén and Litre.



Intervention in the Rumichaca-Pasto Double Lane project (Colombia) with the installation of coconut fiber biomantle.

Visit and awareness day of the environmental team of the Autopista al Mar 1 (Colombia) to the La Volcana school.

6.1.4 Invasive species

We are aware of the adverse ecological impacts that invasive species can cause, such as reducing the amount of water available, disrupting the balance of natural and semi-natural ecosystems and competing with native species, even leading to their complete replacement and resulting extinction.

EU Regulation 1143/2014 identifies the problem of invasive species, **admitting it is a cross-border issue and outlining the need for coordinated actions**. This regulation compiles a list of species of European interest and recommends measures focused on prevention, early detection and rapid eradication, as well as management of the species listed in the regulation.

At Sacyr, we control invasive species during the construction and operation of our projects and none of the work we do involves the introduction of invasive species.

Below are examples of our projects where this control of invasive species is carried out:

Algarve Line

In our project to electrify the railway section of the Linha de Algarve (Portugal), a Control and Management Plan for invasive species is carried out, through which the spots of invasive exotic species are mapped, an analysis of the areas is carried out. mapped and finally, the need to activate control or management measures is evaluated.



An area of **48,256 m²** affected by invasive species has been removed and has been correctly managed as waste.

Belfast Transport Hub

An invasive species management plan has been implemented to limit the spread of in situ invasive species such as Himalayan balsam and Japanese knotweed. Soils containing knotweed were excavated Japanese, transporting them to an authorized facility.



162 tons of soil containing Japanese knotweed were excavated.

Work by Chira-Soria

Prospecting and inventorying the distribution of invasive species in the Barranco de Arguineguín, such as *Austrocyliodropuntia*, has been carried out. *subulata ssp. Exaltata*, *Acacia farnesiana*, *Nicotiana glauca*, *Cenchrus orientalis* and *Arundo donax*. Control and disposal measures are then applied in an authorized landfill. Finally, the restoration of the original plant communities is carried out.



71,574 m² with invasive species has been eliminated.

EU Regulation 1143/2014 identifies the problem of invasive species, [...]. So, we control invasive species during the construction and operation of our projects.

7. Cultural and archaeological heritage



7 | Cultural and archaeological heritage

We recover our past, to build the future

We preserve the cultural, archaeological and paleontological heritage of the communities near the area of influence of our activities. Prior to infrastructure works, archaeological monitoring is carried out in compliance with current regulations, with the aim of collecting and classifying the remains found in the projects.

In 2022 we will provide more than a thousand hours of training to raise awareness of the importance of preserving historical heritage throughout our value chain. Any finds uncovered during the works are transferred to national museums or recognized institutions so that they can be viewed by local people.

By nurturing the artistic and cultural environment, we preserve an important heritage for the community.



Ancestral treasures under the sky of Lima

At the construction site of the WP3 EPC New Terminal, Platform and Access of the Jorge Chávez International Airport, care and recovery activities for archaeological material are carried out. As part of this commitment, the first archeology event was held in February 2023 called "Culture Unites Us". The purpose of this event was to exhibit a representative sample of the various types of cultural materials recorded, recovered and the activities carried out in compliance with the Archaeological Monitoring Plan jointly with our client LAP - Lima Airport Partners, this event was well received by the media and the Minister of Culture, Lic. Leslie Urteaga Peña, was a special guest.



Representative sample of the various types of recorded and recovered cultural materials.

Likewise, as part of our commitment to the care of cultural heritage, to date we have more than 13 thousand cultural evidence, among which are 2 fragments of a jug with the seal of the Jesuit order (IHS), 2 fragments of tiles from the 17th century, 4 lithic mortars, various fragments of colonial ceramics with designs, various fragments of Republican ceramics with contemporary designs and materials from industrial archeology (miniature bottles, glass jars, among others).

Video: <https://www.youtube.com/watch?v=ic-lqhU-zL4>

Traces of the past on the Autopista al mar 1

On the Autopista al Mar 1 (Colombia) we carry out research for the protection of archaeological heritage. Following the framework of the Preventive Archeology Program, we carried out several excavations in various areas of the road, with the participation of expert collaborators in the field, which allowed us to find vestiges of the ancestors, who lived thousands of years ago in our territory.



In the findings it was possible to observe pre-Hispanic remains, ceramics, stone instruments and goldsmith elements. The most important material was delivered to the municipal authorities of our area of influence to strengthen the regional archaeological heritage.

Some findings of archaeological remains were:

12,903
ceramic
fragments



6 earthenware

526
lithic
materials



All activities were closed successfully and included **70 training sessions for communities and collaborators.** The preventive archeology work was admirable.

Relocation of popular religious resources

In the Ruta 66 Concession project – Camino de la Fruta (Chile), the Popular Religious Resources affected by the works had to be relocated. It was guaranteed that its relocation would be as close as possible to its current location and that it would not interfere with the execution of the works.

Furthermore, one of the requirements of the new location was to facilitate safe access to family members, allowing the preservation of religious practices, rites and beliefs, deployed around the cenotaphs, constituting an integral part of the landscape of the route and safeguarding the safety of the families who permanently visit the place.

A dissemination plan was carried out to inform families through the main local radio stations, digital platforms such as WhatsApp and Facebook, among others. Meetings were also held at the community level with the aim of expanding dissemination coverage to establish contact with them.

We recover history in our projects in Spain

- As part of the project to expand highway 35 (Valencia, Spain), we recovered historical and archaeological heritage via the complete excavation of the Roman site of Clots de Rascanya in Llíria. Sacyr fully financed the archaeological dig, the inventory of materials, and their subsequent analysis and documentation, completing the excavation and research of the site of the Roman ovens in Rascanya (1st to 3rd centuries A.D.)
- During the construction of the pier at Punta Langosteira (A Coruña, Spain), petroglyphs (symbols carved on rocks, made by removing its surface layer) were found during the archaeological surveys pertaining to the project. In order to protect the historical value of this site, the rock was carefully removed with a view to its proper conservation and subsequent return to its original location.
- In the construction works of the **Almudévar Reservoir** for the regulation of irrigation in Alto Aragón (Huesca), we have recovered and moved rock by rock the original remains of the south wall of the old Hermitage of Santo Domingo cataloged from late dates in the Middle Ages (12th-13th century).



Remains of the old Hermitage of Santo Domingo, in Almudévar.



Socio-environmental projects to strengthen the community fabric

- In the Concession **Desarrollo Vial al Mar (Devimar)**, in Colombia, we carried out a program to strengthen coffee growing, in alliance with the Coffee Growers Committee of Antioquia, a total of 321 people benefited in 14 villages in the municipalities of San Jerónimo y Ebéjico and the San Sebastián de Palmitas district of Medellín, who received 47 canopies for coffee drying and fertilizers for the sustainability of 620,000 trees that will be renewed by cutting or planting.



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