Climate

Water

Circular economy

Biodiversity

Integrated environmental management

PLANET POSITIVE

‹ Climate
› Water

‹ Circular economy
› Biodiversity

‹ Integrated environmental management

TOWARDS A POSITIVE CONTRIBUTION

INVEST TO REGENERATE THE PLANET

ACCIONA projects pursue a positive impact on the planet, through business models based on decabornisation, the conservation of water and ecosystems and the circular use of resources.

	Responsible	Resilient	Regenerative	
Climate	Decarbonisation	Zero emissions solutions. Mitigation	Climate positive	Extend recognition as main players in the transition towards a decarbonised economy
Biodiversity	Mitigation hierarchy	Digitization 100% Mapping and evaluation	Positive net impact	Generate a net positive natural capital
Circularity	Zero waste approach and renewable resources	Multiply circular nature of processes	New business models	Ability to develop zero-waste projects
Water	Reduction in use	Efficient models access and sanitation	Increase in people benefitting	Significantly increase the provision of quality water and its sustainable use with high-tech

KEY MILESTONES 2021

- Reduction of GHG emissions compared to the base year 2017 by 19% (Scopes 1 and 2) and 28% (Scope 3* categories in SBT), in line with the science-based target. Carbon neutrality in its direct operations maintained.
- 93% CapEx aligned with sustainable activities according to the European taxonomy.
- Voluntary planting of 74,947 trees.
- Reduction by 24% in the amount of waste sent to landfill compared to 2020.
- 27% of recycled or renewable raw materials and material resources used.
- Approval of a new Circular Economy Policy.

MAIN CHALLENGES 2022

- Reduce GHG emissions by 23.08% (Scopes 1 and 2) and by 18.08% (Scope 3*) compared to 2017, in line with the SBT target 2030 of a 1.5ºC reduction, and offset GHG emissions in its direct operations.
- Invest 90% of the CapEx in sustainable activities according to the European taxonomy.
- Voluntary planting of 232,500 trees.
- Reduce the amount of waste sent to landfill by 20% compared to 2020.
- Achieve 14% consumption of resources from a renewable or recycled source.
- Reduce the use of surface water, groundwater and municipal water in water-stressed areas by 11% compared to 2020.

**Categories "Products, services and raw materials; Capital goods; Activity related to energy consumption (not Scope 1 or Scope 2), Transport and distribution up waters, Trips of employees to work and Use of products sold by the organisation" representing more than two thirds of the company's total emissions in Scope 3.*

CLIMATE

A LOW-CARBON BUSINESS STRATEGY

ACCIONA is a leader in sustainable infrastructure solutions and renewable energy projects worldwide. It represents a special case because it invests in the projects it builds and operates.

The company's business model is based on the performance of sustainable activities that are notably in line with the requirements of the European taxonomy, and are focussed particularly on mitigation and adaptation to climate change, whether this is in the area of renewable energy, construction, water management, transport, housing, or any of its other technical capacities.

ACCIONA promotes the adoption of ambitious global targets for a low-carbon economy, so that it includes in its model the management of climate change risks and opportunities. This is communicated in accordance with the European Commission's climate reporting guidelines and the recommendations of the Financial Stability Board, through its Task Force on Climate-Related Financial Disclosures (TCFD).

More information on the Risks and Opportunities report related to Climate Change, in line with the TCFD recommendations:
https://www.acciona.com/our-purpose/sustainability/climate-emergency/?_adin=11551547647

EUROPEAN TAXONOMY OF ENVIRONMENTALLY SUSTAINABLE ECONOMIC ACTIVITIES

The active involvement of financial markets in financing the sustainable economy is indispensable for the European Union's plans to move towards a low-carbon economy.

The EU taxonomy Regulation (EU Regulation 2020/852) which came into force on 12 July 2020, helps to create the world's first 'green list', a classification system for sustainable economic activities, which will develop a common language for investors and companies when it comes to financing projects or goods and services with a substantial positive impact on the climate and the environment.

The proportion of eligible economic activities according to the taxonomy in 2021 was:

- Business Turnover: 71.83% eligible.
- OpEx: 83.02% eligible.
- CapEx: 87.62% eligible.

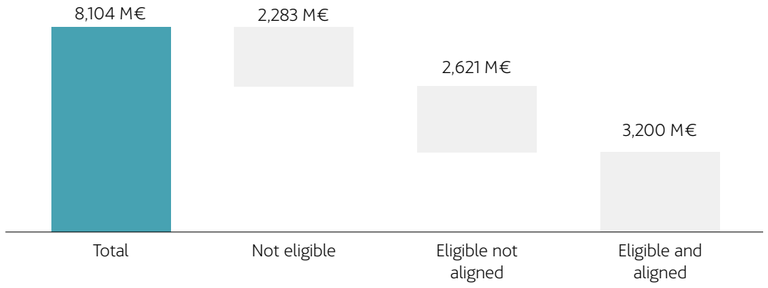
Although reporting the alignment of the activities with the taxonomy on the eligible figure is not obligatory in 2022, just as what happened in the previous two years, the company has carried out and submitted to verification this analysis, with the following results:

- Business Turnover: 54.98% of alignment with taxonomy.
- OpEx: 71.05% taxonomy aligned.
- CapEx: 93.15% taxonomy aligned.

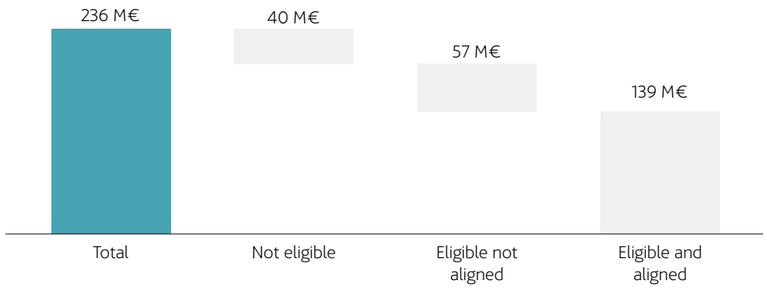
More information. The methodology for the estimate and breakdown of data according Annex II of Commission Delegated Regulation (EU) 2021/2178, of 6 July 2021, is contained in the "Annex of itemised indicators".

The following graphs schematically show the results of eligibility and alignment of ACCIONA's activities with the taxonomy. For the absolute figures of OpEx and CapEx below the specific definitions under Annex I of the Delegated Regulation (EU) 2021/2178 were taken into account, for which reason they may differ from the figures presented under the same heading in the company's financial statements.

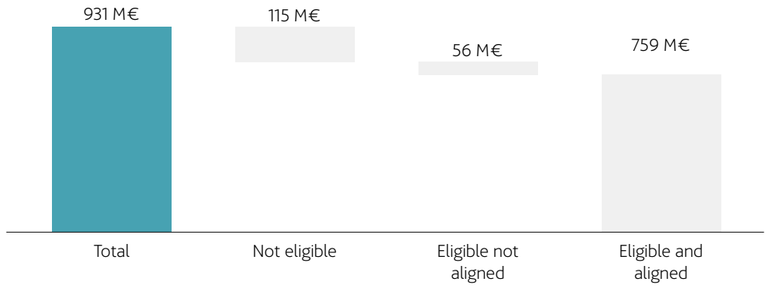
Turnover aligned with the European taxonomy



OpEx aligned with the European taxonomy



CapEx* aligned with the European taxonomy



** The CapEx amount includes 74.6 million euros of investment in the company's assets from transfers to property, plant and equipment in the year from the heading stocks, after changing the strategy of use of them.*

GOVERNANCE AND STRATEGY IN LINE WITH GLOBAL ECONOMIC DECARBONISATION TARGETS

ACCIONA fully shares the objectives of decarbonisation of the economy through public commitments, policies, specific procedures and objectives, and an economic incentive model linked to achieving GHG emission reductions for directors, managers, technical and support staff (see chapter 'People centric').

In terms of climate change governance, the body responsible is the Board of Directors' Audit and Sustainability Committee, which has performed the following functions, amongst others: identify and guide the group's climate change policies, objectives, best practices and programmes; evaluate, monitor and review the plans for implementing these strategies drawn up by group executives; periodically review internal control and management systems and the degree of compliance with these strategies and report to the Board of Directors on climate change policies, objectives and programmes, and the corresponding budgets for their performance.

ACCIONA's Climate Change Policy, which has been approved by the Board of Directors, is reviewed in accordance with the corporate management system standards and one of its priorities is to lead the transition towards low-carbon business models. This climate agenda is embodied in the objectives of the Sustainability Master Plan (SMP), whose initiatives and commitments are managed by the Finance and Sustainability General Management, directly reporting to the Audit and Sustainability Committee. The climate change targets and principles as articulated in the 2025 SMP are as follows:

- Align the investment strategy to activities of mitigation and adaptation to climate change so that 90% of the CaPex may be classified as being in the taxonomy in relation to these two environmental targets.
- Reduce its own emissions and those of the supply chain in the period 2017-2030, in line with the goal established by science not to increase the global temperature more than 1.5°C (60% reduction in Scope 1 and Scope 2 emissions, and 47% reduction in Scope 3 emissions[2]). These are targets approved by the Science Based Targets initiative.

Progress on climate action

In 2021, ACCIONA met its emissions reduction targets, reducing Scopes 1 and 2 by 19% and 28% those of Scope 3 relevant to the categories in the goal compared to 2017. The company has also continued to evaluate and manage its climate change risks by monitoring and consolidating the climate adaptation plans of its businesses.

Use of the internal carbon price

The company subscribes to the petition of the Carbon Pricing Leadership Coalition (CPLC), an alliance that joins political leaders, companies, civil society and academics, for stable, long-term carbon pricing policies. Charging the price of carbon to operating costs is a very effective measure in the fight against the climate emergency.

The company has Guidelines for the use of internal carbon pricing which explains which kinds of prices may favour the company's activities, each with its own objectives, Scope and amount:

- Decarbonisation price: this price, of about €7/tCO2e in 2021, applies effectively to all ACCIONA's business units, which are required to pay according to the GHG emissions they generate. A part of the amount raised is used to offset the emissions generated (Scopes 1+2), while the rest is set aside for the decarbonisation fund, which aims to provide incentives for investment in measures to reduce the carbon footprint.
- Shadow price: this price, €39.5/t CO_2e in 2021 is based on the estimated cost of the effect of the greenhouse gas emissions. It is used in certain bidding for medium and long-term projects as an additional element in the risk analysis of the tender, which contributes to anticipating the resilience of the project to regulatory scenarios arising from compliance with the Paris Agreement.

2 See section on Scope 3 emissions.

Decarbonisation fund

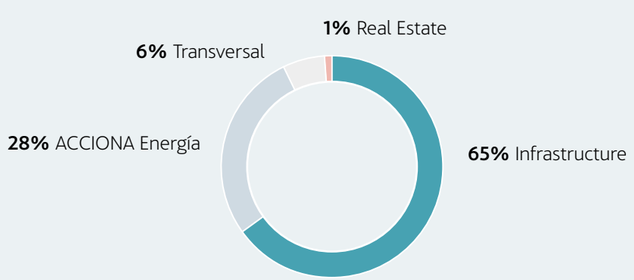
Since 2016, the company has had a fund for which the budget arises from charging the internal price of carbon in its activities. This fund is used to acquire carbon credit to offset the emissions generated from its direct action, but since 2020 it has also been used to invest in projects to reduce its carbon footprint.

The financing of initiatives for decarbonisation through the fund is awarded by means of an internal bidding mechanism. At a first phase, a selection committee decides which proposals are a priority according to their impact and return, until, finally, a committee comprising members of senior management determines the allocation of funds to the most interesting projects.

In 2021, a total of 14 initiatives were financed by the decarbonisation fund, with a potential to reduce emissions of 27,000 tCO_2e and a development period of more than a year for some of the projects. Among others, the following are worthy of note:

- The incorporation of the Artificial Intelligence platform "Maestro" in the desalination plant in Umm Al Houl (Qatar) to optimise the workability and favour energy saving.
- Pilot project for the installation of sets of portable photovoltaic generators in the construction of the new Talca prison.
- The viability analysis for the use of electric vehicles in each of the applications proposed by the company.
- Design of a tool for the characterisation of emissions per building process.
- Design of facilities for heat recovery of a CPD and geothermal systems in buildings representative of the company.
- Project to reduce CH_4 and N_2O emissions in biomass combustion plants through continuously monitoring the levels of combustion and the adjustment of associated parameters.
- Pilot transformation cell facility without SF_6.

Emissions reduced by the fund per business division.



MANAGING THE RISKS OF CLIMATE CHANGE

The management of climate risks at ACCIONA is carried out through the application of a specific corporate procedure, which identifies, evaluates, prioritises and communicates to the company's executive bodies the risks associated with climate change that might affect the group and its centres. This process results in the establishment of policies for action and tolerance thresholds that provide a reasonable guarantee that objectives will be met, both in the short term (one year), the medium term (the five years in which each Sustainability Master Plan is in force) and the long term (10 years, in accordance with observations of mega-trends and already established targets, such as the SBTs).

A number of tools are used to identify climate risks and opportunities, notable among which is the company's digital climate change model that monitors, for all ACCIONA centres, the historic and projected climate variables in different temperature increase scenarios and with different timelines, all of them provided for in the latest IPCC reports. This instrument also oversees the production, financial, emissions generation and energy consumption variables. It also includes references to the climate policies and the carbon markets in each region, thereby constituting an essential source of information when it comes to anticipating situations, particularly those related to medium-long term physical events and short-medium term transitions. Specifically, in order to provide for medium-long term transition scenarios, the identification of activities within the European taxonomy is a necessary requirement. In addition, during the identification process other tools are used that are not yet integrated in the digital model, such as those devoted to the identification of legal requirements; also indispensable in this regard is the experience of the members of the groups evaluating the scenarios.

The risk management process is carried out every year and begins with the configuration of groups of experts at the level of each business. Using the tools mentioned above, each unit proposes a battery of risk scenarios for each ACCIONA location, group of locations and/or activities of the company (or of its value chain), taking geographical exposure and vulnerability into account.

The climate scenarios most commonly used to identify risk cases of transition risk are those that anticipate a limited temperature increase of 1.5°C to 2°C, while for physical risk scenarios (RCP 6 and RCP 8.5) an increase of at least 3ºC is contemplated.

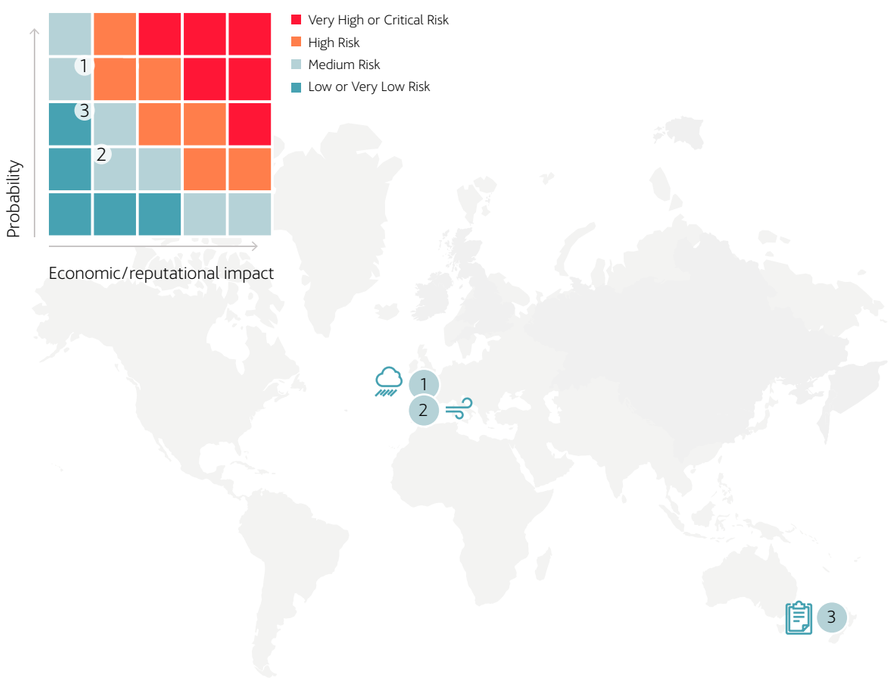
Once identified, each risk scenario is evaluated in terms of the probability of it occurring and the economic and reputational consequences. These variables are then used to determine the risk level of each of the scenarios considered (see chart with the climate risks highlighted). For those with a greater risk of occurring, each assessment group prepares specific reports informing the company's decision-making bodies about mitigation options and the estimated costs associated with them.

At the final stage, the climate risk scenarios are integrated into ACCIONA's general risk management process, which governance is overseen by the Board of Directors (the Audit and Sustainability Committee is the body ultimately responsible for climate change in the company), the Finance and Sustainability Committee and the Management Committees of the divisions.

Key climate risks and opportunities

Shown below is an evaluation of the most significant climate risk and opportunity scenarios for ACCIONA in 2021, together with their potential impact and timeline, geographical scope, business lines affected and the actions taken to manage them. Generally speaking, it can be affirmed that ACCIONA's business strategy is resilient to climate change, with a moderately low impact in terms of risk and a high impact in terms of opportunities.

Climate risks



N°	Category	Description	Type of impact	Business	Risk management and mitigation
1	Physical	› Lower hydraulic generation in Spain due to reduced run-off. A medium risk is identified in the long term.	Decreased revenue (very low)	Energy	Processes for monitoring and controlling changes in the production and management of reservoirs are being implemented with weather forecasting to enable better planning and management of the reservoirs.
2	Physical	› Reduction of the production derived from the decrease in wind resource in Spain. A medium risk is identified in the long term.	Decreased revenue (low)	Energy	The capacity to manage risk is limited but a policy of geographical and technological diversification of installed capacity has been implemented to mitigate the risk.
3	Regulatory	› Increase in the operational cost of the machinery fleet of the business in Oceania owing to the introduction of a tax/price on carbon for the diesel emissions of the site machinery. A medium risk is identified in the medium term.	Increased costs (very low)	Oceania infrastructures	Inclusion of energy efficiency and emissions criteria in the decisions on acquisitions of new machinery and vehicles. Replacement of older machinery with more efficent models. Consideration of leasing options.

Adaptation to climate change: "Thermal stress" campaign to prevent heat strokes

One of the most significant consequences of climate change is the increase in average and maximum temperatures, as well as increased frequency and duration of heat waves. In this way, the risk of a heat stroke increases, especially for the employees who work outdoors.

To adapt to this scenario, last summer, ACCIONA launched the "Thermal stress" campaign, aimed at the employees most exposed to heat, by means of which the main rules of action were promoted to perform work outdoors under high temperatures.

Key climate opportunities

Category	Description	Type of impact	Business	Opportunity management
Products and services	Increase in the demand for renewable generation infrastructures due to regulatory changes in climate change. The European Green Deal legislation is a palpable example of this type of opportunities in the short, medium and long term.	Increased revenue (very high)	Energy	Commitment to an investment of at least €7,800M in installed capacity from renewable energies in 2021-2025, when ACCIONA intends to operate more than 20 GW (10 new GW) of renewable energy. The new installed MW will mean an increase of income. This strategy will carry on growing further than 2025, with a target of installed capacity >30 GW in 2030.
Products and services	Increase in the worldwide demand for low carbon transport infrastructure because of the predicted mobilisation of capital for investment in sustainable activities in line with the requirements of the European Union taxonomy.	Access to financing (high)	Infrastructure	Structuring of the infrastructure projects portfolio with greater weight for those in line with the opportunity detected.
Products and services	Increase in the demand for water treatment infrastructure in regions where greater shortages are predicted because of climate change. Opportunity in the short, medium and long term.	Increased revenue (high)	Infrastructure	Structuring of the water treatment infrastructure portfolio with notable presence in the countries identified, which are where currently around half of the economic activity is generated.

Infrastructures for the adaptation to climate change

75% of the infrastructures that will be operational by 2050 have not been built yet, for which reason their role in the adaptation to climate change is an increasingly relevant topic.

In this respect, ACCIONA participates in several projects particularly leading to this adaptation, among which worthy of note in 2021 are the construction, operation and maintenance for 29 years of an overflow channel of more than 48 kilometres long between Fargo (North Dakota) and Moorhead (Minnesota). The infrastructure will divert rain and storm water from Red River, and once it has been completed, it will protect more than 235,000 people who live in the main population centres in the region against potential flooding.

KEY CLIMATE METRICS AND INDICATORS

Emissions generated

The emissions generated are calculated according to the criteria defined in the GHG Protocol, under the financial control scheme, consolidating as CO_2 equivalent emissions corresponding to all the GHGs that are important for the company: CO_2, CH_4, N_2O, HFC and SF_6. The criterion for the consolidation of energy consumption and other emissions follows the same accounting criterion.

The conversion factors used are those indicated by:

- Intergovernmental Panel on Climate Change (IPCC), in the 2006 IPCC Directives for GHG inventories.
- National Inventory of Greenhouse Gases (GHG) of Spain.
- International Energy Agency.
- Red Eléctrica de España (the Spanish grid operator).
- ACCIONA's Green Energy business line.
- The UK Department for Environment, Food and Rural Affairs.
- The European Environment Agency.

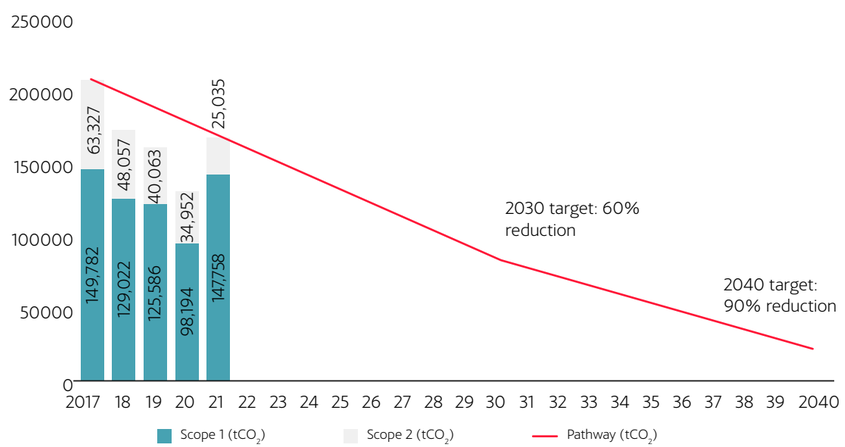
Scope 1 and Scope 2 emissions

In 2021, the company's aim, in line with the science-based target for 2030, was to reduce its Scope 1 and Scope 2 GHG emissions by 18.46% compared to the base year 2017. It has managed to reduce them by 19%.

The sum of Scope 1 and Scope 2 CO_2e emissions generated in 2021 was 172,792 tonnes, of which 147,758 tCO_2e were Scope 1, and 25,035 tCO_2e were Scope 2 market-based (156,753 tCO_2e Scope 2 *location-based*).

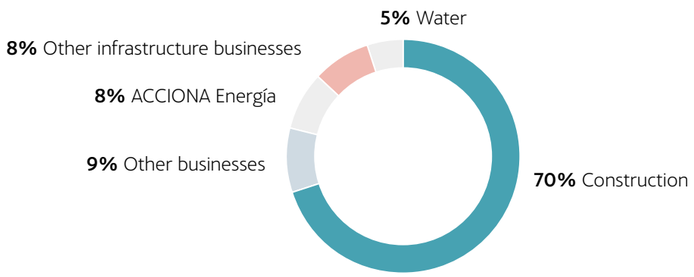
ACCIONA's carbon intensity value was 21.3 tCO_2e /million euros of sales (Scopes 1 and 2).

Evolution of emissions generated (tonnes of CO_2e)



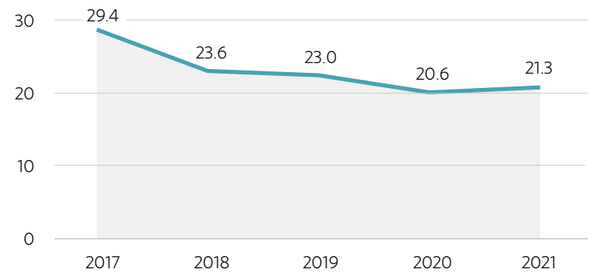
The increase in GHG emissions compared to 2020 is mainly owing to the big increase in the construction activity in Oceania, which entailed an increase of almost 50,000 TCO_2e in this business. Nevertheless, the water and energy business, which historically produce the highest amount of GHG emissions, managed to reduce their GHG emissions. The implementation of energy efficiency measures, such as adjustment of biomass combustion plants, which has reduced, has also been very important, which has reduced CH_4 and N_2O emissions by more than 1,544 tCO_2e. Finally, the acquisition of electricity from certified renewable sources and i-RECs[3](15,335 of which, equivalent to 7,605 tCO_2e, were acquired at the corporate level) have been very important.

Scopes 1 and 2 per business line (%)



3 i-REC is an international renewable energy certificate for 1 MWh energy. Unlike a guarantee of origin, it may be cancelled by the energy end user. It is accredited by the International REC Standard Foundation and recognised by the GHG Protocol.

Intensity of GHG emissions (tCO_2/sales)



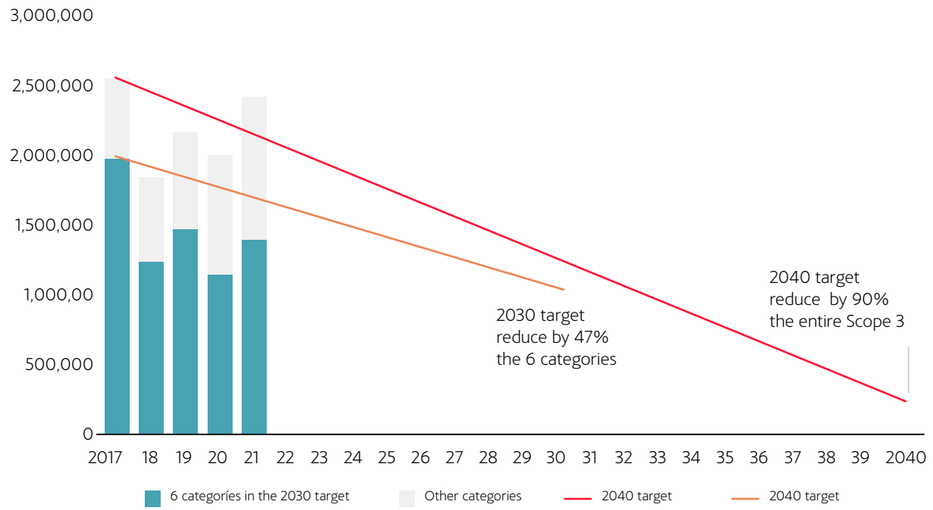
In 2021, biogenic emissions generated totalled 468,205 tCO_2.

Scope 3 emissions

For 2021, ACCIONA set a science-based target to reduce Scope 3 GHG emissions by 14.46% compared to base year 2017 for the set of categories "Products, services and raw materials; Capital goods; Activity related to energy use (non-Scope 1 and non-Scope 2) and Upstream transport and distribution, employee commuting and use of products sold by the organisation". Scope 3 emissions figure for these 6 categories has decreased by 28% compared to 2017 (2017 data: 1,994,537 tCO_2e), while the drop for the entire Scope 3 emissions was 5%.

In 2021, the company continued to implement measures to reduce Scope 3 emissions: use of life cycle analysis tools in project design, inclusion of the risk of climate change (MA/CO_2 variables) in the supplier risk map[4] and sustainability training courses available to suppliers.

Targets of Scope 3 reduction in the net zero commitment 2040



4 More information in the chapter Exponential leadership-Supply chain.

Scope 3 emissions in relevant categories for ACCIONA (tCO_2e)

Category	2017	2018	2019	2020	2021
Purchased goods and services	**947,033**	**764,918**	**948,031**	**993,471**	**945,462**
Capital goods	**630,764**	**299,156**	**400,978**	**255,640**	**338,729**
Energy-related activities (not Scope 1 or Scope 2)	**147,461**	**25,109**	**26,626**	**23,375**	**16,210**
Upstream transport and distribution	**203,034**	**48,443**	**37,179**	**27,976**	**35,312**
Waste generated in operations	**14,861**	**10,451**	**3,764**	**6,189**	**8,234**
Business travels	**17,190**	**17,785**	**14,336**	**3,973**	**6,153**
Employee commuting	**55,568**	**61,957**	**61,487**	**60,198**	**65,009**
Upstream leased assets	**486,985**	**557,942**	**649,565**	**589,267**	**962,694**
Use of sold products	**10,677**	**54,657**	**13,325**	**21,291**	**27,366**
End-of-life treatment of sold products	**144**	**191**	**155**	**161**	**91**
Investments	**39,040**	**19,346**	**26,775**	**29,804**	**27,022**
Total (tCO_2e)	**2,552,757**	**1,859,956**	**2,182,221**	**2,011,346**	**2,432,282**

The headings "Downstream transport and distribution", "Processing of sold products", "Downstream leased assets" and "Franchises" are considered irrelevant for ACCIONA because these activities are not carried out or their emissions are now included in Scopes 1 and 2 or in another Scope 3 category.

Emissions avoided

At the end of 2021, ACCIONA had 11,245 MW of renewable capacity installed, having generated 24,541 GWh. This renewable production avoided[5] the emission into the atmosphere of 13.4 million tonnes of CO_2e, 11,209 tNOx, 32,377 tSOx and 264 tPM_{10}.

5 These emissions correspond to those that would have occurred if ACCIONA's electricity production in each country had been generated by the same country's fossil fuel electricity mix.

Emissions avoided per country by generating renewable electricity

Countries	Installed capacity (MW)	Production (GWh)	Emissions avoided (tCO_2e)
Australia	592	1,149	**974,758**
Canada	181	476	**324,990**
Chile	922	2,085	**1,803,145**
Costa Rica	50	254	**180,107**
Croatia	30	81	**37,670**
United States	1,126	1,970	**1,134,199**
Egypt	186	436	**242,282**
Spain	5,736	12,218	**5,373,298**
Hungary	24	42	**23,675**
India	164	371	**348,319**
Italy	156	253	**112,802**
Mexico	1,480	4,008	**1,845,501**
Poland	101	204	**157,957**
Portugal	165	376	**160,684**
South Africa	232	523	**547,071**
Ukraine	100	95	**92,287**
TOTAL	**11,245**	**24,541**	**13,358,745**

Own energy consumption

In 2021, ACCIONA consumed 8,902 TJ of energy, 75% of which came from renewable sources.

This means that the company's fossil-fuel energy intensity stood at 0.28 TJ/million euros sales, while energy intensity from renewable sources was 0.82 TJ/million euros in sales.

The company has also established a target for reducing non-renewable energy consumption in line with its science-based GHG emission reduction objective (18.46% compared to the 2017 figure, consolidated under the same criteria as in 2019). This target was met, with non-renewable energy consumption falling below the 2,269 TJ target.

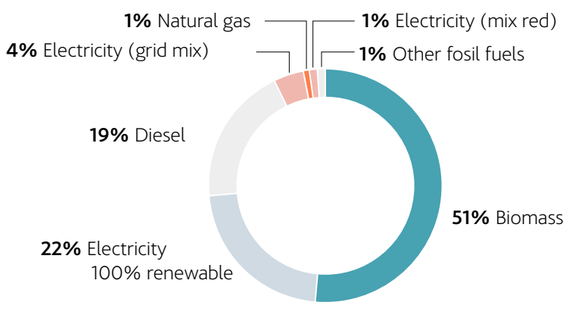
.

Energy consumption (TJ)

	2017	2018	2019	2020	2021
Renewable	**5,740**	**5,698**	**5,432**	**5,461**	**6,633**
- Fuel	**4,384**	**4,712**	**4,621**	**4,543**	**4,598**
- Electricity	**1,356**	**986**	**811**	**917**	**2,034**
Non-renewable	**13,331**	**4,488**	**2,013**	**1,855**	**2,269**
- Fuel	**8,787**	**1,692**	**1,623**	**1,297**	**2,011**
- Electricity	**4,544**	**2,796**	**390**	**557**	**258**
Total (TJ)	**19,071**	**10,186**	**7,445**	**7,316**	**8,902**

The 2017 and 2018 figures include activities that are no longer attributable to the company. Discounting these activities, the figures would be:
Renewable: 5,625 (2017) and 5,476 (2018)
Renewable electricity: 1,241 (2017) and 763 (2018)
Non- renewable 2,619: (2017) and 2,157 (2018)
Non-renewable fuels: 1,902 (2017) and 1,604 (2018)
Non-renewable electricity: 717 (2017) and 553 (2018)
Total: 8,244 (2017) and 7,633 (2018)

Energy consumption by source



External energy consumption (GJ)

Category	2018	2019	2020	2021
Purchased goods and services	**11,327,661**	**14,551,269**	**14,718,262**	**15,941,261**
Capital goods	**4,231,087**	**5,697,955**	**3,608,315**	**4,972,422**
Energy-related activities (not Scope 1 or Scope 2)	**517,024**	**543,894**	**506,160**	**294,545**
Upstream transport and distribution	**659,103**	**503,346**	**372,464**	**463,217**
Waste generated in operations	**138,896**	**50,023**	**82,248**	**109,437**
Business travels	**251,756**	**203,160**	**57,607**	**88,711**
Employee commuting	**853,119**	**850,388**	**852,323**	**920,433**
Upstream leased assets	**145,453**	**6,063,896**	**5,316,475**	**7,896,714**
Use of sold products	**622,020**	**201,701**	**279,147**	**331,524**
End-of-life treatment of sold products	**2,542**	**2,062**	**2,143**	**1,208**
Investments	**423,611**	**625,681**	**682,533**	**502,473**
Total (GJ)	**19,172,272**	**29,293,375**	**26,477,676**	**31,521,945**

The items "Downstream transport and distribution", "Processing of sold products", "Downstream leased assets" and "Franchises" are considered irrelevant for ACCIONA either because these activities are not carried out or their consumption is now included in the company's consumption or in another category of external energy consumption.
The 2018 figures include or exclude activities whose attribution to the company as energy consumption of third parties has changed. With the current attribution, the figures would be:
Assets leased to the organisation: 4,625,865 (2018). Total: 23,652,684 (2018)

Third-party energy consumption

Presented below is the most relevant energy consumption outside the organisation, calculated according to the company's Scope 3 categories.

In 2021, ACCIONA had a Scope 3 energy reduction target in line with its science-based GHG emission reduction target.

WATER

ACCIONA has a specific Water Policy approved by the Board of Directors' Audit and Sustainability Committee, the main objective of which is to contribute to the fundamental human right of access to drinking water and sanitation.

ACCIONA recognizes that water is a finite and irreplaceable natural resource, and so its water management strategy takes into account the availability and quality of this natural resource and the equilibrium of the ecosystems where it is found.

ACCIONA's water agenda is determined by strict compliance with the law, responsible and efficient management, the establishment of specific objectives through the Sustainability Master Plan, the development of new technologies, the integration of water into risk management, the extension of its principles to the value chain and transparent communication.

ACCIONA's use of water

There are 3 different ways in which ACCIONA uses water in its operations:

01 **Treatment and distribution of water for customers:** this is water that is captured in desalination, drinking water and water treatment plants or services operated by the company for the supply of water to customers. The principal characteristic of these waters is the fact that the quality levels must be fit for human consumption or compliant with the legally established decontamination levels. In 2021, the volume of water treated by ACCIONA was 1,033 hm^3 (497 hm^3 in water-stressed countries), while the water distributed from primary networks and groundwater sources amounted to 92 hm^3.

02 **Water for internal consumption:** this is water used by the company at its own facilities. This use includes freshwater obtained from the municipality, as well as surface and groundwater, which consumption in water-stressed areas is intended to reduce by 10% in 2021 compared to 2020 (in 2021 the consumption remained steady). It also includes the use of water from sources that do not deplete available natural reserves, such as rainwater, recycled mains water and water reused or recycled on site (in 2021, 36% of ACCIONA's total water for internal consumption came from one of these three sources).

03 **Discharge:** this refers to the residual water from internal consumption that has not evaporated or been used in any company asset and that is removed from the facilities as specified in the relevant discharge permits. This section includes brine discharged from the desalination plants which account for the highest percentage of its discharges. All wastewater discharged by the company complies with the specifications in the relevant discharge permits.

The company and bodies responsible for the environment implement prevention measures to minimise possible impacts on species that might be found in river ecosystems and other bodies of water, as well as rules for respecting the environmental flow system and the technical requirements set by the administration itself. The processes that guarantee compliance with the requirements for water collection and discharge are part of the environmental management systems implemented, verified and certified by the company according to the ISO 14001 international standard.

The volume of treated water in 2021 increased compared to the previous year mainly because of the expansion of the SWRO Facility D (Qatar), which caused high growth in the production of drinking water from the desalination plant.

On the other hand, the volume of water for internal consumption increased, especially in the categories of surface water and rainwater collection as a result of the activities of earth movement in Western Sydney Airport (Australia).

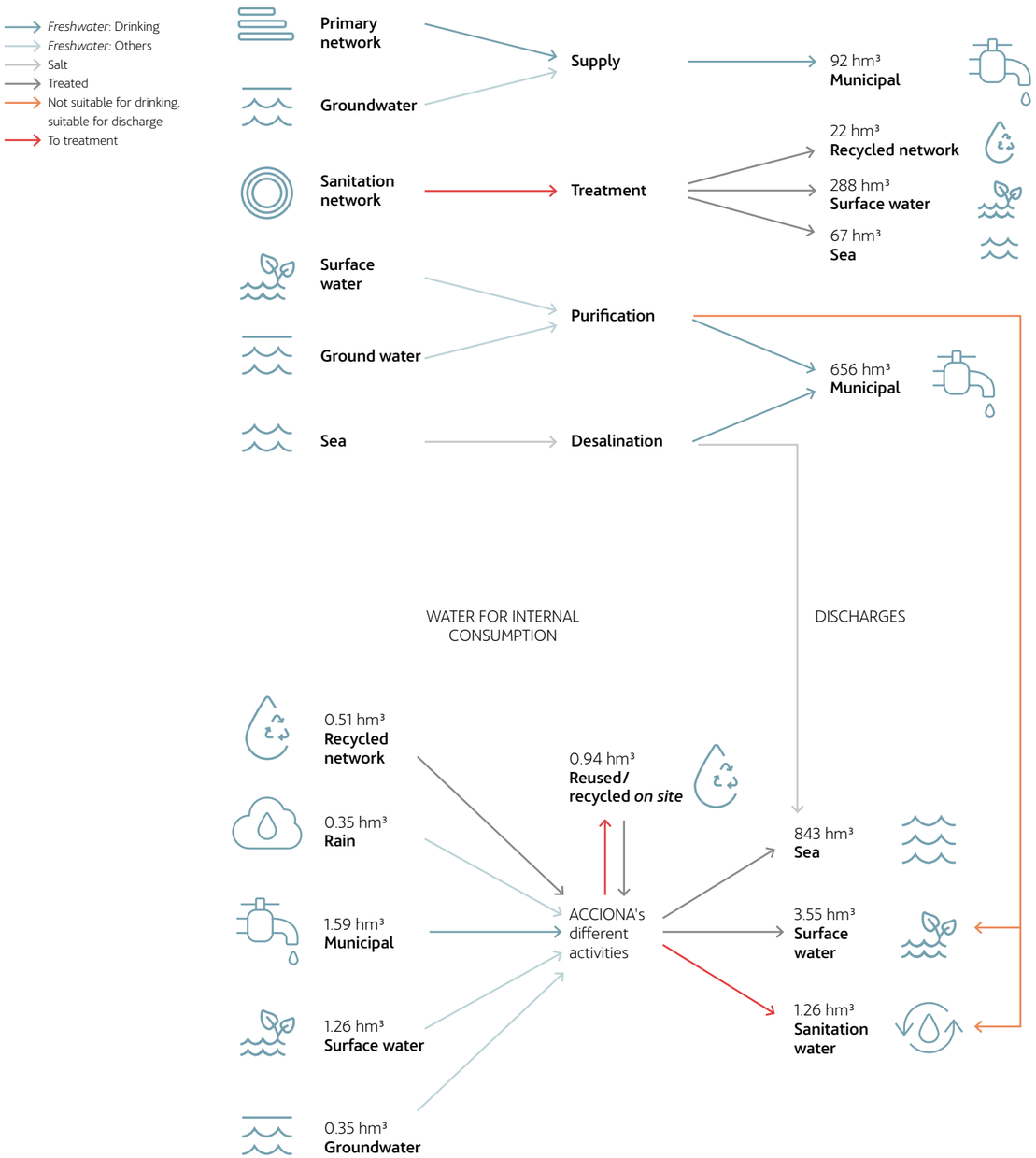
ACCIONA also calculates the water consumption (surface and groundwater) associated with its suppliers, resulting in just over 8.1 hm^3 for its direct suppliers and 40.5 hm^3 for its entire supply chain.

Waste generation increased, mainly owing to the expansion of the SWRO Facility D.

In relation to water-stressed countries, the company set itself the objective to reduce by 10% the consumption of surface water, groundwater and municipal water compared to 2020. This target could not be met because the consumption has hardly changed compared to the previous year.

> The volume of treated water in 2021 increased compared to the previous year mainly because of the expansion of the SWRO Facility D (Qatar)

Water usage in 2021



Desalination plants in water-stressed countries

ACCIONA continues to respond to the demand for water treatment infrastructure in regions with water stress or with predicted water shortages due to the climate change.

In this respect, in 2021 the construction and start-up of the desalination plants of Al Khobar I and Shuqaiq 3, Saudi Arabia, and of Jebel Alí in Dubai, were completed, with a production of 210, 450 and 182 million litres of drinking water per day, respectively. These are one of the biggest desalination plants in both regions.

Use of recycled water during construction of the tunnels in the WestConnex project in Australia

All the execution processes of the tunnels require significant amounts of water mainly for cooling the cutting heads of the excavation/drilling tools.

During the construction of the WestConnex tunnels, a storage and recycling system of the water generated by the said cooling process was implemented, so these may be used in a closed circuit, and have allowed savings of up to 245,000 m^3 of drinking water in 2021. This amount entails to this day 63% of water consumption of the works and has helped to save about AUD 1.1 million.

CIRCULAR ECONOMY

ACCIONA relies since 2021 on a circular economy policy which aspiration the project development observes without contributing virgin materials or fossil energy, without waste generation and regenerating the environment. ACCIONA carries out multiple actions testifying to its performance in this area. For example:

- It generates renewable energy from inexhaustible sources such as the sun and the wind, and from agricultural and/or forest waste.
- It produces drinking water from seawater in areas with water stress, using the best available techniques from an energy expenditure standpoint. It purifies waste water, preserving and improving the natural capital, which also facilitates it reuse.
- It develops infrastructure that results in benefits for transport efficiency, the generation and distribution of renewable energy, waste management and the sustainability of cities.
- It provides services in shared electric mobility, infrastructure maintenance, energy management and segregated collection of waste, in addition to taking care of transport, classification and recovery of said waste.

ACCIONA also optimises the circularity of its processes in the following way:

- It uses life cycle analysis tools (7 LCAs carried out in 2021), allowing it to assess and reduce the impact of its developments, and also its consumption of material and energy.
- It minimises its fossil fuel energy use.
- It rationalises its water use and makes use of alternative water sources that do not exhaust the existing resources.
- It gives a second life to the waste and subproducts deriving from its processes, such as soil, rubble, ash, slag, plant remains and sewage sludge.
- It maximises the usefulness of the materials and uses sustainable resources such as recycled aggregates, renewable materials such as FSC certified wood and biomass, or advanced materials such as composites, which reduce to a minimum the amount of components used.
- It carries out intensive R+D+i work in all areas of its activity, improving the efficiency of its processes and the performance of the resources used.
- It uses digitisation as a catalyst for circular opportunities in construction, either through technologies such as building information modelling, machinery automation or 3D printing.
- It works closely with its stakeholders in training and awareness-raising on the circular economy.

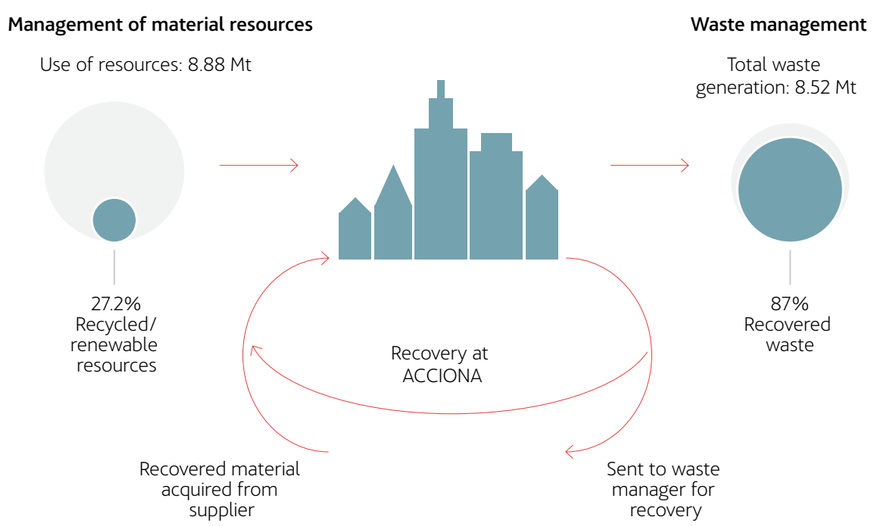
RESOURCES AND WASTE MANAGEMENT IN LINE WITH THE CIRCULAR ECONOMY

Within the new framework of the SMP 2025, ACCIONA has resolved to increase its efforts in the area of the circular economy, and to halve the amount of non-recovered waste generated in 2020, and double the percentage of renewable/recycled resources used by the company. In the year 2021 this commitment has translated into:

- A 10% reduction in hazardous and non-hazardous, non-recovered waste generated in 2020.
- Use of at least 12% resources from recycled/renewable sources.

The following diagram shows, as in the Circle Economy *Circularity Gap* graph, the flows of materials at ACCIONA in 2021..

Material flows at ACCIONA



6 The Circularity Gap Report: https://www.circularity-gap.world/

Waste generation and management

	2018	2019	2020	2021
Non-hazardous waste (tonnes)	9,602,772	3,784,469	6,269,769	**8,497,787**
Non-hazardous waste to landfill (tonnes)	4,053,423	940,177	1,457,220	**1,103,724**
% of non-hazardous waste to landfill	42%	25%	23%	**13%**
Non-hazardous waste recovered (tonnes)	5,549,349	2,844,293	4,812,549	**7,394,063**
% Non-hazardous waste recovered	58%	75%	77%	**87%**
Hazardous waste (tonnes)	8,633	2,761	5,071	**25,880**
Hazardous waste to landfill (tonnes)	-	-	4,380	**10,228**
% of hazardous waste to landfill	-	-	86%	**40%**
Hazardous waste recovered (tonnes)	-	-	691	**15,652**
% Hazardous waste recovered	-	-	14%	**60%**

Use of resources

	2018	2019	2020	2021
Total resources (tonnes)	17,403,599	5,452,965	8,440,914	**8,882,855**
Recycled or renewable resources (tonnes)	5,065,995	490,135	923,038	**2,415,460**
Recycled or renewable resources (%)	29%	9%	11%	**27%**

Recycled or renewable: biomass, certified wood (FSC or similar), soil, aggregates, steel, recycled paper and cardboard
The 2020 data were re-expressed owing to the criteria change in recording the resources in the construction of energy facilities. They were all previously recorded upon completion of the work, but consumption is now estimated each year during the execution of the work.

In 2021, the company generated a total of 25,880 tonnes of hazardous waste. This means a big increase compared to the 2020 figure (5,071 tonnes), which is mainly owed to the use of asphalt in works in Oceania. On the other hand, 8,497,787 tonnes of non-hazardous waste were generated, of which 1,103,724 were sent to landfill (24% less than the previous year, thus achieving the company's target) and 7,394,063 were recovered (reuse, recycling or other means). The latter figure means 87% of the total non-hazardous waste generation. It is worth highlighting, for example, the 100% reuse of legally recoverable slags and ashes generated in the company's biomass plants. The increase in waste generation compared to last year is due to the greater earth movement at sites such as a building work of line 6 in the Sao Paulo underground (Brazil).

As regards the consumption of resources, in 2021, 8,882,855 tonnes were consumed, a figure slightly lower than that of the previous year. Furthermore, the percentage of materials from a renewable source has increased significantly, from 11% in 2020 to 27% in 2021.

Circular economy in the Mesena site (Madrid)

The works comprise a real estate complex covering approximately 104,000 m² intended to transform the pre-existing office complex into a "business campus", to host the future, new headquarters of ACCIONA.

The project meets the requirements of LEED V4.1 Sustainable Certifications in the entire Campus, achieving the Platinum certification in two of the buildings and the Golden Certification in the rest, receiving also the WELL V2 Certification that guarantees the well-being of the occupants.

Thanks to a series of actions applied to the building of the campus, ACCIONA managed to recover up to 85% of the waste generated in the process:

- The gravel of the non-crossable roofs was recovered for use in sills and crossings of site paths.
- The demolition debris was used for the restoration of landscape of an old gravel pit.
- Multiple elements of pre-existing buildings were dismantled and reused, such as solar panels, tramex, exterior platforms, electrical engines, water tanks and air conditioning units.
- The water used in the sealing tests of coatings was reused for all the buildings by using transfer pumps.
- Concrete manufactured with recycled aggregates was used in the slabs and pillars. Recycled graded aggregates and gravel were used.
- Storage systems for rain water were installed with their own treatment mechanism, to reuse the water for irrigation.

Recovered paper waste for the project of the E6 Ranheim-Værnes road

Quick clay is relatively common in Norway and represents a challenge in the construction projects of motorways due to the loss of resistance that they may experience as a consequence of being washed by freshwater.

Today, materials such as cement and lime are used to stabilise quick clay and thus ensure the safe construction of the projects.

The investigation carried out by ACCIONA jointly with several institutions demonstrated that paper ash has properties similar to that of cement. Therefore, an innovative system to stabilise the surface on the E6 motorway from Værnes to Ranheim was tested, by using the ashes from paper recovery.

Paper may be recycled many times until the cellulose fibres are too short. Cellulose fibres worn and other paper waste are burned to produce energy, sending the resulting ashes normally to landfill.

The results of the tests performed will allow to recover the paper ashes from a factory located only 40 km from the project and may contribute to reduce greenhouse gas emissions associated to the treatment of quick clay up to 70%, thanks to the replacement of cement/ lime with another element a lot less carbonic.

BIODIVERSITY

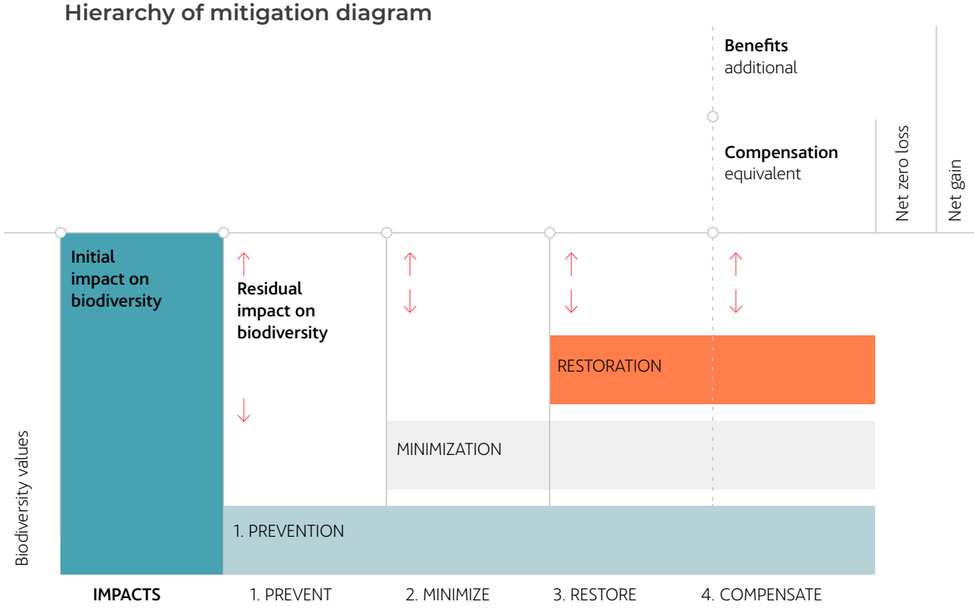
For the company, biodiversity conservation and the responsible use of natural heritage are not only an ethical commitment but also a necessary condition for global sustainability. ACCIONA has a specific corporate biodiversity policy which uses a variety of principles to promote the appreciation for and conservation of animal and plant species as a necessity for economic development and social progress.

In its new Sustainability Master Plan 2025, ACCIONA has included a strategic line on biodiversity, with the aim of both applying the hierarchy of mitigation of impacts in all its projects and setting targets that can generate a positive material result for the environment and biological diversity through natural science-based solutions.

Hierarchy of mitigation in biodiversity

ACCIONA accords priority to the hierarchy strategy of mitigating impacts on biodiversity, identifying and preventing possible negative effects, minimising those that cannot be avoided, applying restoration actions and, finally, taking offset actions to achieve a Net Positive Impact. The company develops environmental surveillance plans to control and monitor the initiatives made.

Hierarchy of mitigation diagram



Source: modified from UICN 2015

BIODIVERSITY PERFORMANCE INDICATORS

Location with respect to the protected area

Location with respect to the protected area	Surface (ha)
Internal	**2.777**
Partially internal	**443**

In 2021, several NGO's and civic organisations in Mexico expressed their concern for the possible impact on biodiversity of the Calakmul biosphere of the Maya Train project led by the National Fund for the Promotion of Tourism (initials in Spanish, Fonatur). The railway infra-

structure is about 1,500 kilometres long and several contractors are cooperating, including ACCIONA. The protected area is located outside the section of 60.3 kilometres in which the company is engaged, which covers from Playa del Carmen to Tulum.

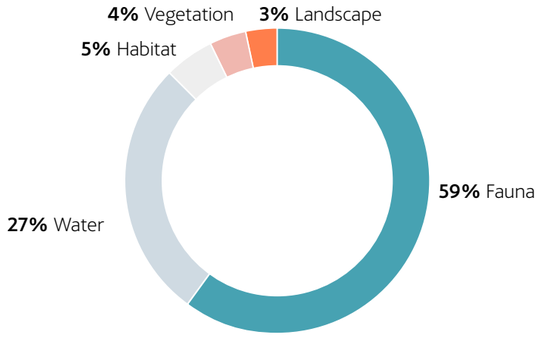
Identification and assessment of the most significant impacts

ACCIONA identifies and assesses the most significant impacts of its facilities located in protected and non-protected areas that are of great value for biodiversity.

In 2021, the most significant impacts were identified in the fauna (59%) and the water (27%), and, to a lesser extent, the habitat, the vegetation and the landscape.

This assessment took into account the species affected, the surface area of the facility within the protected area, the duration of the impacts, and whether they were reversible or irreversible.

Most significant environmental impacts by area



Protected species

The company identifies the species affected by its facilities according to the Red List of Endangered Species prepared by the International Union for Conservation of Nature (IUCN) or included in national conservation catalogues.

The table below shows the number of species and the degree of protection according to the IUCN Red List. Furthermore, it takes into account the species that are not included on this list but are protected by national catalogues.

Protected species affected by ACCIONA facilities

IUCN Red List Protection Category		N°. of species
CR	**Critically endangered**	**8**
EN	**Endangered**	**32**
VU	**Vulnerable**	**21**
NT	**Near threatened**	**5**
LC	**Least concern**	**128**
Other national catalogues		**50**
TOTAL		**244**

HABITAT RESTORATION AND PROTECTION

ACCIONA's projects consider the protection and restoration of those areas that could be affected by its facilities. As such, these projects involve work to protect and restore habitats, such as replanting, maintenance of forests and planting of affected areas.

Throughout 2021, the company has protected and restored 82 hectares in the areas surrounding its centres. Likewise, the services business has carried out the restoration, cleaning and environmental maintenance of hundreds of hectares of high environmental value.

As a result of these habitat restoration and protection actions, as well as other work in landscape integration or plantations in degraded areas or those lacking in vegetation, in 2021, a total of 892,100 plantations were carried out (of which 73,947 were voluntary tree plantations).

> Throughout 2021, the company has protected and restored 82 hectares in the areas surrounding its centres

Voluntary plantations in renewable energy generation

According to the aim of ACCIONA Energía to invest to regenerate the planet, in 2021 the company planted trees voluntarily in some of the countries in which its assets are. This initiative contributes to fight global warming involving the absorption of CO_2 that trees do, favouring biodiversity as they provide food and shelter to animal species, and it reduces the erosive effect of the reforested land.

Voluntary planting increased to a total of 73,947 trees.

In Spain, 60,000 trees were planted for the reforestation of burnt Public Utility Mountains. Specifically, the company participated in two projects: Public Utility Mount No. 60 "Valle De Iruelas" by planting 20,000 trees and the reforestation in Public Utility Mount No. 134 "Orzaduero" by planting 40,000 trees. The species used were wild pine tree (*Pinus sylvestris*), birch tree (*Betula alba*) and rowan (*Sorbus aucuparia*). The company has undertaken to maintain the planted trees for at least 40 years.

In Mexico, under this voluntary initiative, 11,947 trees were planted in the area where the Oaxaca wind farms are located. The main aim of plantations is to rehabilitate important natural areas in the ejidos and communities which had previously changed land use from forest to agricultural use and were abandoned. For the reforestation of these areas 6 different species were used, mainly moringa (*Moringa oleifera*), oak tree (*Quercus robur*) and river tamarind (*Leucaena leucocephala*).

In India, 2,000 trees were planted in the surroundings of Tuppadahalli wind farm

Voluntary planting	In Spain, were planted	In Mexico, were planted	In India, were planted
73,947 trees	**60,000** trees for reforestation of burnt Public Utility Mountains	**11,947** trees	**+2,000** trees

Protection of the Eltham copper butterfly under the Southern Program Alliance (Australia)

The project forms part of an initiative of the Victorian government to improve the public transport network in the city of Melbourne. In January 2021, in the Hurstbridge line an Eltham copper butterfly, a species classified as in danger of extinction, which had been last seen in the area in 1978, was identified in the area of the project.

Having quickly identified the species led to creating a total exclusion area for all the staff of the project and the subcontractors. In this way, access to the area was restricted and the project was redesigned with the client to ensure the protection of the Eltham copper butterfly and its habitat.

Bodies of water significantly affected by catchment or discharge

ACCIONA needs to collect and discharge water for certain activities: for example, the production of renewable electric power in hydroelectric power plants, where the water, after passing through the power plant, is sent back to the riverbed without its composition being altered; also for the supply of drinking water at drinking water treatment plants (DWTP) and seawater desalination facilities (SWRO); and finally, for construction work.

In this context, the company uses prevention measures, such as water treatment prior to discharge or the installation of systems that improve the connectivity between river sections, that help minimise any potential impacts on species that may be present in river ecosystems. This also guarantees respect for the regime of environmental flows and the technical requirements established by the competent authorities.

INTEGRATED ENVIRONMENTAL MANAGEMENT

ACCIONA's business model is based on the development of sustainable infrastructure. This is a challenge which has mainly been focused in recent years on the decarbonization of the energy mix through the generation of renewable energy; the design, construction and operation of resilient infrastructure; and the mitigation of water stress in large regions of the planet. Taking into account that all industrial activity involves a potential impact on the environment where it takes place, the company adheres to the precautionary principle, especially when it comes to managing environmental, climate and water risks in an integral way, reducing and offsetting emissions, promoting the circular economy, and conserving biodiversity.

ACCIONA has especially qualified staff in each of the functional, hierarchical and geographical areas. This means that top quality and experience can be employed at all times in pursuing the company's business, always according to the strictest environmental standards.

Last year, the company allocated €111.42 million to the management (prevention, reduction or correction) of the environmental impacts generated by its operations (€107.35 million in expenditures and €4.07 million in investments).

ACCIONA continues to promote its commitment to environmental training. In 2021, employees received a total of 8,451 hours of training in areas such as climate change, environmental management systems, waste management and environmental restoration of degraded areas, among others.

Principles of successful environmental management

ACCIONA's environmental management model, based on the principles of improving environmental performance, establishes a common framework of action that facilitates the coordination of the different environmental management systems of each one of the divisions. This model addresses the determination of environmental aspects from a life cycle perspective, and, even the identification of risks and opportunities as a way of ensuring improvement.

Through the company's environmental management systems, the potentially negative impacts of the company's carbon emissions and other harmful gas emissions, discharge, waste generation, use of resources in addition to noise and light pollution, are identified, evaluated and minimised, while maximising the positive impacts.

ACCIONA's environmental management systems are verified and certified by accredited independent bodies, according to the ISO 14001 standard.

The components of the management model are as follows:

01 Identification, evaluation and minimisation of environmental alterations that may be caused during the company's activities.

02 Analysis of environmental risks through a regulated technical procedure that quantifies the risk of an accident that could cause environmental damage or have a negative environmental impact on ACCIONA Energía's business.

03 Identification and verification of legal requirements using tools especially designed for this purpose which make it possible to manage compliance with administrative obligations and other commitments, in addition to legal requirements.

04 Operational control using corporate tools which compile quantitative environmental information for each location, thereby making it possible to manage the environmental evolution of processes, set targets and define strategies.

05 Recording and classifying environmental near-misses[7].

06 Implementation of tools for continuous improvement, identification and dissemination of lessons learned and good practices.

07 Establishment of annual goals on all businesses, taking as a reference the identification of the most significant environmental aspects in the management systems and the SMP.

7 An environmental near miss is any incident that does not result in damage to the environment, but has the potential to do so. During 2021, the company has recorded 363 environmental near misses. 46 of these involved spills, with a total volume of 281 m³ of spillage. All cases have been resolved by taking corrective action.

Evaluation and management of environmental impact

Last year, 82 projects promoted by ACCIONA were subject to Environmental Impact Assessment (EIA). In 15 cases, favourable environmental impact statements were obtained. The EIAs for these projects were published in the corresponding official bulletins and platforms were set up by the government to channel citizen participation and obtain their feedback in this regard.

In addition, ACCIONA tracked 298 Environmental Monitoring Plans (EMPs) at centres and facilities that were under construction, up and running or under maintenance.

Environmental fines and penalties

In 2021, a total of €1,988 was paid, corresponding to 3 environmental fines/penalties.

Provisions relating to probable or certain liabilities, litigation in progress and indemnity or outstanding obligations of an undetermined amount of an environmental nature, not covered by the insurance policies taken out, are made at the time when the liability or obligation determining the indemnity or payment arises.

Other emissions

Global emissions of NOx in 2021 were 2,040 tonnes, SOx 135 tonnes, PM_{10} 77 tonnes and SF_6 0.032 tonnes. The company set as target to reduce this type of emissions by 2% compared to the 2017 figures (discounting activities no longer attributable to ACCIONA). The target was met for SOx and SF_6.

Evolution of other emissions (t)

	2017	2018	2019	2020	2021
NOx	**14,683**	**1,767**	**1,673**	**1,539**	**2,040**
SOx	**3,351**	**248**	**193**	**141**	**135**
PM_{10}	**958**	**76**	**74**	**51**	**77**
SF_6	**0.094**	**0.050**	**0.059**	**0.055**	**0.032**

The 2018 data for NOx include activities that are no longer attributable to the company. Discounting these activities, the figures would be: 1,762 tonnes.