

WHAT IF  
THE  
SMARTEST  
DECISION  
WAS  
TO INVEST  
IN THE  
PLANET?

**INTEGRATED REPORT 2019**



BUSINESS AS UNUSUAL



# WHAT IF THE SMARTEST DECISION WAS TO INVEST IN THE PLANET?

**INTEGRATED REPORT 2019**



BUSINESS AS UNUSUAL

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# Letter from the Chairman

José Manuel Entrecanales  
CHAIRMAN OF ACCIONA

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ACCIONA's 2019 Integrated Report is being published in the midst of one of the most acute crises that humanity has faced in recent history. This situation has created great uncertainty and severely tested the mechanisms that our society and its institutions have to resist and overcome adversity, however unexpected and unknown.

My thoughts are with everyone who has lost a loved one in recent months, particularly those who are part of our company. Hundreds of thousands of citizens all over the world have sadly been united by a common tragedy. They have the full sympathy and solidarity of ACCIONA.

Since the very beginning of the crisis caused by the Covid-19 pandemic, our priority has been to preserve the health of ACCIONA's people. This is no easy task, since our work in many geographies is linked to the delivery of essential services such as electricity and water, as well as operating in the front line in hospitals and ambulances, and providing facility cleaning services. The conduct of our professionals in these critical situations is exemplary, and we are proud of their performance, especially during the toughest weeks of the crisis. I would like to pay tribute to them and also to the thousands of ACCIONA

volunteers around the world who provided support and assistance where we were required. There are no borders in this crisis, no states, no north or south.

Situations like the one we are experiencing encourage us to persevere in our main mission as a company, focused on strengthening the basic mechanisms that make societies work. Infrastructures on which to base models of prosperity that are capable of realising the inalienable goal of economic growth and fairer social development in harmony with our planet, which we have been exploiting recklessly for decades.

Just months ago, it was common in business forums to talk about the need to promote changes in the role of companies in social design. Although the short-term outlook has changed, the roadmap to a more inclusive and planet-friendly economy and the role that companies must play in this process—both in overcoming the crisis and in addressing the recovery—remain unchanged. In fact, while engaging in the reconstruction, we must not forget that the crisis occurred just as we were beginning to lay the foundations for a transition towards a cleaner and more balanced and decarbonised

economic model; also that, if we wish to complete the task, we must not deviate from that goal, so as to avoid irreversible negative consequences for our climate, for biodiversity and the environment, and for the health of people and our economies.

As a result, all stimulus policies and measures that are adopted for the recovery, and the actions of companies themselves, should be shaped by initiatives such as the “European Green Deal”, so as to ensure that the right decisions are made to enable us to respond to the economic crisis while, at the same time, transforming our societies on the basis of a sustainable, climate-neutral economy.

This approach offers us the opportunity to focus the recovery efforts on building the foundations of a new model. History is giving us a second opportunity to make our world more resilient to future threats and to accelerate a transition that, due to climate and social imperatives, we will inevitably have to address in the coming years.

## Outlook

Although our ongoing analyses have forced us to amend the forecasts and conjectures for 2020 that we made at the beginning of the year, our company is determined and firmly committed to those goals.

During 2019, we developed our businesses around solutions capable of responding more effectively to the challenges of the global progress agenda. From energy, water management, the development of cities and transport, through health services and ecosystem regeneration to electric mobility, ACCIONA wants to continue playing a leading role in changes that require a different understanding and approach.

This report is a good opportunity to describe our performance in 2019. It was a year in which we met and exceeded the goals we had set.

We increased EBITDA by 9% and net profit by 7.2% in comparison with the previous year. Capital expenditure was also higher than planned as we seized some attractive opportunities that will set the pace of growth in the coming years. The company's net debt/EBITDA ratio was below our ceiling of 4, reflecting increasing operating efficiency and also solid growth in profit margins, in line with our strategy. Our business is stable, predictable and growing, based on a pipeline of projects

with attractive returns and a risk profile that is balanced between greenfield and brownfield projects.

We are one of the leading corporations, forerunners in developing and managing sustainable basic infrastructure and positioned in a new industry that is seeking to transform the nature of infrastructure.

Our “business as unusual” approach has been recognised by the European Commission as being appropriate for a low-carbon economy, and our core competency is the ability to design, build and operate complex infrastructure assets for third parties or for our own portfolio applying an end-to-end approach that we call SMART: Sustainable, Mitigating, Adaptive, Resilient and Transforming. This unique approach enables us to offer integrated solutions designed for progress and superior regeneration.

Over the next few years, we will continue to take advantage of the acceleration in the renewable energy market, expanding our 10 GW of installed capacity with new projects in a pipeline that already exceeds 13 GW worldwide.

We will strengthen our lead in developing opportunities related to basic infrastructure, which during 2019 resulted in significant growth in total capacity, as we achieved record levels of order intake and competitiveness.

In over a century of history, ACCIONA has evidenced its superb skills in developing profitable opportunities related to meeting real needs. An uncommon ability to understand the challenges facing a society in evolution. Our determination and the trust of the markets make us a preferred choice for clients who want to turn ideas into profitable infrastructure assets—assets that are designed and operated to maximise the progress of the societies they serve.

We do not know what the future will be like, but we can be relied on to seek and find solutions to complex problems, to support a necessary recovery that will undoubtedly make us stronger and more aware of the major transformations that lie ahead.

# At a glance

## Profile, results and progress in 2019

ACCIONA is an end-to-end developer of sustainable infrastructure based on a distinctive vision.

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### **BASIC INFRASTRUCTURE, ADVANCED APPROACH**

ACCIONA is one of the main companies in Spain's IBEX 35 index and it has a presence in more than 40 countries. The company offers itself as an expert in designing a better planet, responding to basic infrastructure, water and energy needs through innovative, responsible solutions that produce real progress.

ACCIONA employs close to forty thousand professionals, who achieved 7,191 M€ in turnover in 2019 and 1,356 M€ in EBITDA.

ACCIONA develops solutions that make it possible to adopt a comprehensive approach to the global challenges. Its business model has a SMART approach: based on Sustainability, Mitigation, Adaptation, Resilience and Transformation. SMART infrastructures are facilitating the transition to a low carbon economy and helping to solve some of the most complex challenges facing humanity, such as the provision of clean energy, the need for efficient, low-emission transport, water scarcity, the right to decent housing, the social infrastructure shortfall, and waste management.

ACCIONA has unique competencies enabling it to expand in this area. With an investment of 1.2 B€ in this class of infrastructure in 2019, the company demonstrated the soundness of its strategy based on sustainability. This capital expenditure enabled it to achieve 10 GW of installed renewable capacity and an EPC portfolio of 8 B€.

## KEY FIGURES

### Beating the objectives

ACCIONA amply exceeded the goals set for 2019. The 9% increase in EBITDA was better than the objective of flat growth, while ordinary net profit surged by 60.3%, well above the double-digit growth target.

During 2019, the company increased capital expenditure by 24% with respect to the planned 1 B€. Energy was the business that invested the most, allocating 509 M€ to new renewable generation assets, including the construction of new plants in Chile, the USA and Mexico.

ACCIONA ended 2019 with 352 M€ net profit, a 7.2% increase over 2018.

Net financial debt amounted to 5,317 M€, i.e. 3.92 times EBITDA. Accordingly, the company met its target of keeping leverage below 4.

The company's results reflect growing operating efficiency, solid growth in margins and a clear strategy aimed at providing sustainable solutions for clients.

	2019 Objectives	2019 Actual
EBITDA	Headline EBITDA - flat/mid-single-digit growth	✓ 1,357 M€ (+9% headline)
	Like-for-like EBITDA - high-single digit growth	✓ 1,255 M€ (+13% like-for-like)
Ordinary net profit	Double-digit growth	✓ 352 M€ (+60%)
Capex	1 B€	✓ 1.2 B€
NFD / EBITDA	Below 4.0x	✓ 3.92x

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The objectives for 2020 are being reviewed as of the date of this report due to the potential impact of the COVID-19 crisis.

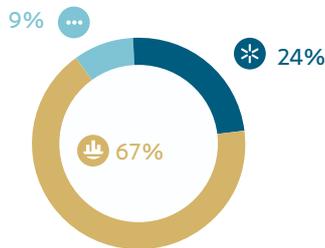
A stable, predictable growth business

**2017** | Investment focused on preserving strategic profitability

**2018** | Sound operating performance and growth visibility

Revenues

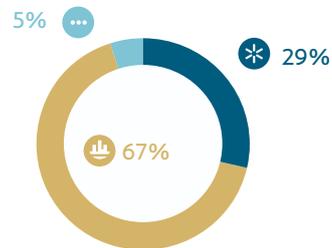
**7,254 M€** | 3,172 M€ Spain  
4,082 M€ International



Note: consolidation adjustments amounting to -113.

Revenues

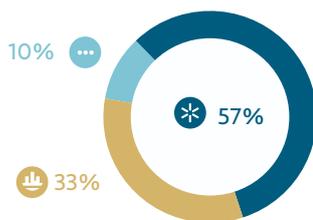
**7,510 M€** | 3,181 M€ Spain  
4,329 M€ International



Note: consolidation adjustments amounting to -347 M€.

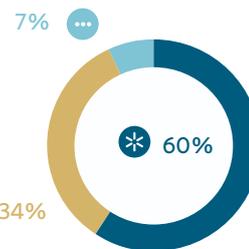
EBITDA

**1,275 M€** | EBITDA margin  
17.6% (-2.4 pp)



EBITDA

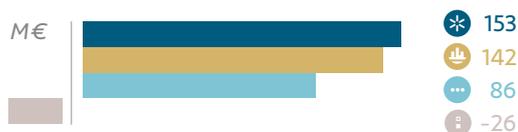
**1,245 M€** | EBITDA margin  
16.6% (-1.0 pp)



Note: consolidation adjustments amounting to -3 M€.

EBT

**382 M€** | Ordinary EBT

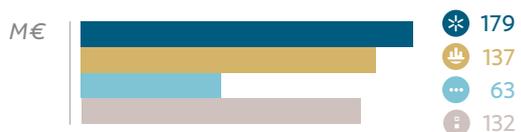


**356 M€** | TOTAL EBT

Note: consolidation adjustments amounting to 1 M€.

EBT

**377 M€** | Ordinary EBT



**509 M€** | TOTAL EBT

Note: consolidation adjustments amounting to -2 M€.

**220 M€** | Attributable net profit

**328 M€** | Attributable net profit



Energy



Infrastructure



Other businesses

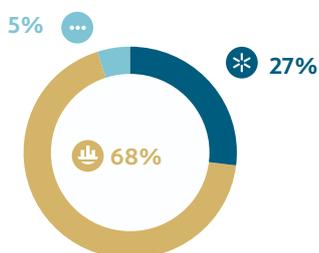


Outcome of corporate transactions

**2019** | Continuous improvement in line with objectives

Revenues

**7,191 M€** | 2,970 M€ Spain  
4,221 M€ International

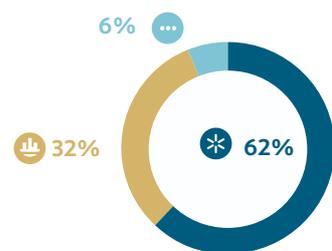


- ▼ **-319 M€** -4.2% (vs. 2018)  
**Reduction of Energy revenues (-9.5%)**
  - › Reduction of the EPC construction business<sup>1</sup>
  - › Lower hydroelectric output and sale of solar thermal assets in Spain
- Slight decrease in Infrastructure revenues (-0.5%)**
  - › The Water business offset the lower volume in Construction
- Decrease in revenues from Other Activities (-7.8%)**
  - › Sale of Trasmediterránea in the second quarter of 2018

Note: <sup>1</sup> Puerto Libertad in 2018

EBITDA

**1,357 M€** | EBITDA margin 19%



- ▲ **The margin increased by 3 percentage points**
  - › Application of NIIF16 about leasing expenses<sup>2</sup>.
  - › Agreement reached with the client in the Sydney Light Rail project.
  - › Absorption of development expenses for new energy assets under construction.
- ▲ **112 M€ EBITDA** +9 % (vs 2018)
  - › **Energy** 102 M€ ▲13.7 %
  - › **Infrastructures** 12 M€ ▲2.9 %
    - Construction 61 M€ ▲26.8 %
    - Concessions -16 M€ ▼32.0 %
    - Water -47 M€ ▼41.4 %
    - Service 13 M€ ▲45.4 %
  - › **Other businesses** -2 M€ ▼2.6 %

<sup>2</sup> First year of application of the changes in the rule.

EBT

**545 M€** | Ordinary EBT



**545 M€** | TOTAL EBT

Note: The outcome of corporate transactions was 0

**352 M€** | Attributable net profit

## MILESTONES IN 2019

Significant  
Milestones

**S.M.A.R.T. infrastructure** gaining traction <sup>3</sup>

**Australia** is now the largest overseas market

The renewable energy pipeline totals **13 GW**

### January

- › ACCIONA ranks among the “2019 Global 100 Most Sustainable Corporations”. ●
- › Inauguration and commercial operation of the Kathu Solar Park solar thermal plant in South Africa. ●
- › Completion of the construction of the Puerto Libertad photovoltaic complex (Mexico), 404 MW, the largest renewable installation built to date by ACCIONA. ●

### March

- › Construction begins on the Mortlake South wind farm, ACCIONA's fifth in Australia, with 157 MW capacity, representing an investment of 180 M€. ●
- › Contract to maintain 4,200 kilometres of roads in Canada. ● ●

### May

- › ACCIONA becomes the largest 100% renewable electricity supply company in Spain, according to the National Commission on Markets and Competition (CNMC) based on 2018 figures. ●
- › Financial completion of the Shuqaiq 3 desalination plant in Saudi Arabia, worth over 530 M€, which will supply drinking water to more than 1.8 million people. ●

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### February

- › Assembly of three photovoltaic plants in Egypt completed; 150 MW in total, owned 50% by ACCIONA. ●
- › Signature of PPA with Viva Energy, Australia's leading energy company. ●

### April

- › 5-year contract to design, build, operate and maintain a WWTP in Ho Chi Minh City (Vietnam), worth 200 M€, that will benefit more than 1 million people. ●
- › Contract for railway construction south-east of Melbourne (Australia), worth 335 M€. ●
- › ACCIONA arranged its first sustainable syndicated loan with a principal of 675 M€; the 17-bank syndicated includes Banco Santander and BBVA as joint sustainability agents. ●

### June

- › ACCIONA arranges, with CaixaBank, the first Green Letter of Credit in the European financial system for an amount of 129 M USD for the construction of the Puerto Libertad photovoltaic plant (Mexico). ●
- › Contract to build the Moss railway line in Norway, worth 650 M€, in consortium with Bane NOR, the Norwegian government's railway infrastructure agency. ● ●
- › Contract to supply high voltage renewable energy to all Aena airports in the Iberian Peninsula in 2020. ●

<sup>3</sup> Based on Sustainability, Mitigation, Adaptation, Resilience and Transformation



Transport

Water

Energy

Cities

Awards and M&A

Sustainable finance

Recognitions

**Better growth** prospects in the Spanish energy market

Strengthened global lead in **water desalination**

Execution of **major contracts** and growth in the backlog

**July**

- › **Bestinver acquires securities firm Fidentiis**, adding 350 M€ in assets under management. ●
- › **ACCIONA leads the “Business Ambition for 1.5°C: Our Only Future” campaign**, under the auspices of the UN Global Compact. ●
- › **ACCIONA announces a tender offer** for the remainder of Polish construction company Mostostal Warszawa, S.A., and attains a 62% stake. ●

**September**

- › **Inauguration of the final section of the Toowomba bypass** (Australia), built with Plenary Group and Cintra Infraestructuras, involving an investment of 1,100 M€. ●
- › **Inauguration of the Roskilde Fjord motorway** in Denmark. ACCIONA designed and built the road, worth 133 M€. ●

**November**

- › **ACCIONA applies the European Union’s taxonomy for the classification of sustainable activities**, obtaining a first overview of the areas of the company that have significant potential to mitigate climate change. ●
- › **ACCIONA confirmed, for the fifth consecutive year, as the world’s greenest electric utility** in the “New Energy Top 100 Green Utilities” ranking, produced each year by Energy Intelligence. ●

**August**

- › **Contract for the construction, operation and maintenance**, for 20 years, of a waste-to-energy plant in Aberdeen (Scotland), with a budget of 400 M€. ● ●

**October**

- › **Acquisition of a portfolio of photovoltaic projects in the United States** totalling 3,000 MW (rated). ● ●
- › **Contract to supply 100% renewable electricity** to a desalination plant in the Atacama region (Chile) in collaboration with state-owned company ECONSSA. ● ●
- › **ACCIONA fully subscribes a 10% capital increase** at Nordex, amounting to 99 M€. ●

**Diciembre**

- › **ACCIONA commissions its ninth wind farm in the United States**, at Palmas Altas, Texas, with 144.9 MW capacity, an investment of around 180 M€. ●
- › **Contract to build a waste-to-energy plant** in East Rockingham (Australia) for 320 M€. ● ●
- › **Acquisition of part of the infrastructure backlog of Australian company Lendlease Engineering** for 110 M€. ● ●
- › **ACCIONA plays an active role in COP25.** ●

## Share performance

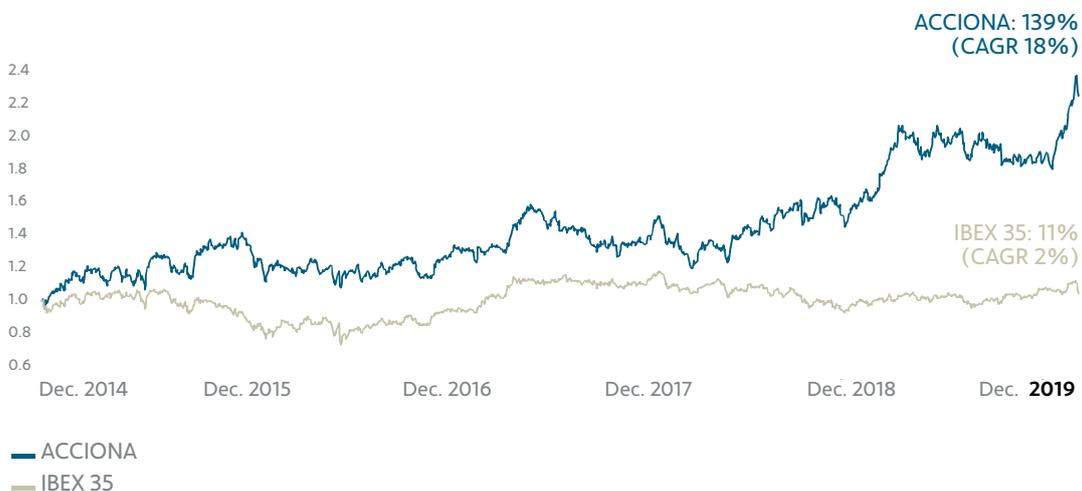
The share ended the year at 93.80 € (vs. 73.80 € at the end of 2018), and its market capitalisation stood at 5.178 B€. The compound annual return for shareholders (including dividends) over the last five years is 18%, compared with 2% for the IBEX 35 in the same period. This positive share performance is a tribute to the company's strength and growth potential.

### Key figures 2019

<b>54,856,653</b> shares at 31/12	<b>5,178 M€</b> capitalisation at 31/12	<b>93.8</b> Closing price 31/12 (€/share)
	<b>4,231 M€</b> (2018)	<b>73.9 M€</b> (2018)
<b>74.8</b> Low 31/12 (€/share)	<b>105.7</b> High 31/12 (€/share)	<b>26.45%</b> Revaluation in the year
<b>59.82</b> (2018)	<b>82.3</b> (2018)	<b>8.61%</b> (2018)

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### Total Shareholder Return (5 years) - ACCIONA vs. IBEX 35

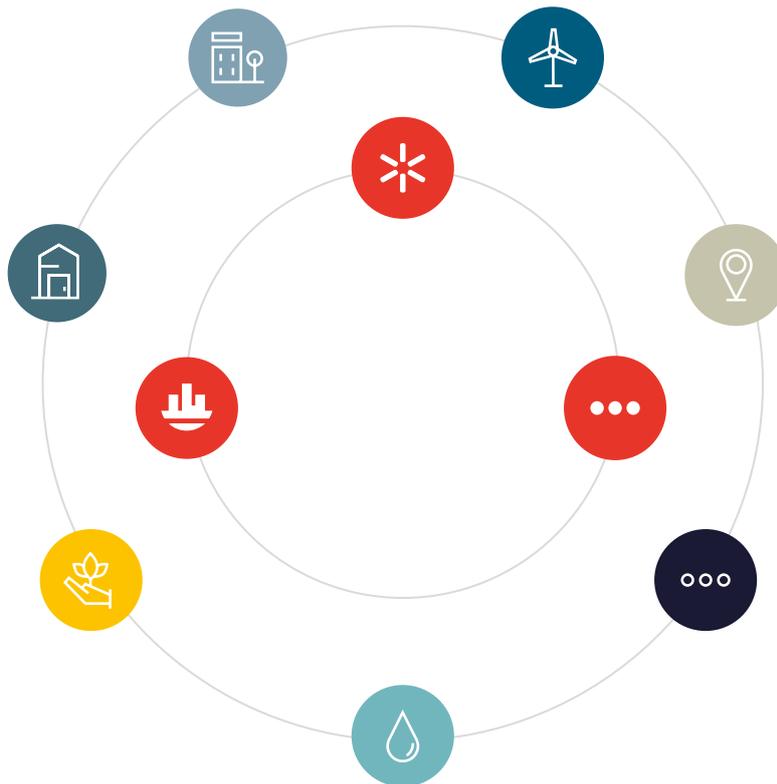


## THE COMPANY'S HISTORY



## ORGANISATION AND OPERATIONAL STRUCTURE

ACCIONA is organised in three divisions that specialise in seven types of solutions.



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### DIVISIONS

- Energy
- Infrastructure
- Other businesses

### SOLUTIONS

- Energy
- Transportation
- Social
- Cities
- Real estate
- Water
- Other solutions



## ENERGY DIVISION

More than two-thirds of the world population lives in countries where photovoltaic solar energy and onshore wind are the most competitive power generation sources<sup>4</sup>. Clean energy has high growth potential worldwide and has been attracting market interest for years. .

<sup>4</sup> Source: Bloomberg New Energy Finance

ACCIONA has extensive experience in the design and construction of renewable plants, both company-owned and for third parties, and has the advantage of owning one of the world's largest portfolios of renewable energy assets. It focuses mainly on wind and photovoltaic technologies, which are the most mature and have the highest growth potential, while exhibiting a high level of efficiency that is constantly being improved; they are also the most competitive technologies in economic terms in many markets.

Given the current inexorable energy transition, ACCIONA stands out because of its maturity and experience, with a portfolio of assets that ensure recurring profitability over time. Additionally, this market's growth prospects point to solid returns and value creation over the long term. The company is committed to pursuing its diversification strategy in terms of geographies, products and clients.



### Keys to success

#### › A world leader in renewable energy

ACCIONA is currently the world's largest renewables-only electric utility. It has a unique profile, as it is present throughout the value chain. The company was a pioneer and a leading player in the development of renewable energy; having accumulated a solid track record, it currently ranks #1 in the Energy Intelligence "Top 100 Green Utilities" for the fifth consecutive year.

#### › Scale and global reach

ACCIONA operates more than 10 GW in the main renewable technologies (wind, solar photovoltaic, hydro, solar thermal and biomass), although it is concentrated in the most competitive ones: onshore wind and solar photovoltaic. It has assets in 16 countries on 5 continents, evidence of its ability to develop, build and operate under different environments and regulations.

#### › Long-term vision

One of ACCIONA's main objectives is to ensure the highest quality in assets so that they operate in optimal conditions for as long as possible, while creating socio-economic value at the local level in the regions where it operates.

#### › High standards of performance and quality

ACCIONA is committed to excellence in the construction and operation of its assets in order to increase their value over time. In parallel, the company promotes responsible management with people, ensuring that its professionals work in the optimal conditions of health and safety.

#### › Optimal management of energy sales

ACCIONA has expanded selectively while ensuring the profitability of its portfolio. The company has extensive experience in managing the sale of electricity and focuses its efforts on diversifying mechanisms for this purpose (auctions, corporate PPAs, attractive tariffs, participation in wholesale markets, ...). Given renewables' increasing penetration in the electricity mix, this capacity and sophistication in portfolio management are increasingly valuable, making it possible to enhance management of the system.

#### › Culture of growth and entrepreneurship

The company has gained a lead by focusing from the outset on sound, diversified, profitable investments in renewables, prioritising exposure to stable geographies with growth prospects and adding other countries with long-term potential. ACCIONA continues to work on cutting-edge energy solutions, such as storage and hybridisation, and on pioneering projects such as Power-2-Green Hydrogen.

In order to drive growth in the next decade, which will be the decade of renewable energy, the company is preparing to invest an aggregate of about 4 B€<sup>5</sup> in 2020-2024 to increase its installed capacity to 15 GW. This new commitment will be implemented through over 1.1 GW already under construction in 2020 together with the extensive pipeline under development.

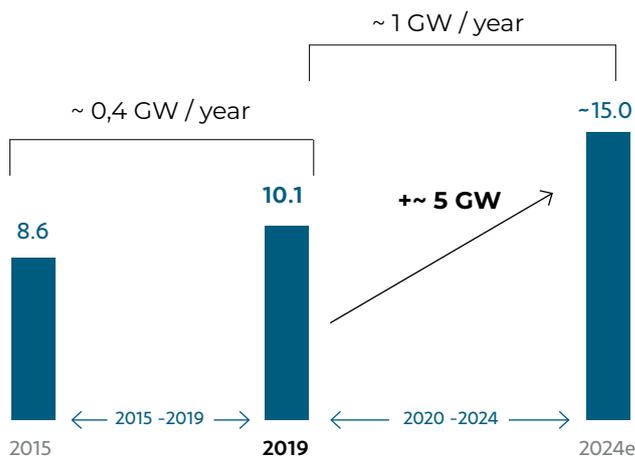
The pipeline comprises mainly an even balance between wind and solar photovoltaic projects. There are already 13 GW of those technologies at various stages of development, located mainly in the company's strategic geographies (75% in the United States, Mexico, Chile, Australia and Spain).

In addition to the challenge of preparing for the next ten years, there will also be an increase in commercial activity to support growth in the supply of clean energy, something that consumers are increasingly demanding. The fact that ACCIONA attaches great importance to meeting deadlines and budgets, as well as its reliability in guaranteeing supply, give it a competitive edge over other companies in the sector.

ACCIONA will also continue to enter potentially interesting new markets, while always applying strict profitability, risk and sustainability criteria to its investment decisions.

### Medium- and long-term visibility - Accelerating investment in 2020-24

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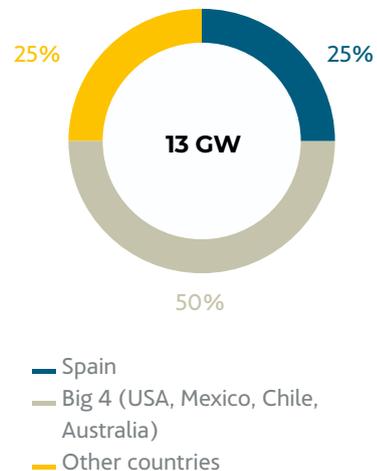
Capacity will increase by approximately **5 GW** in 2024

- › Aggregated investment of about 4 T€
- › Hurdle rate: risk-adjusted weighted average cost of capital (WACC) + >200bp (basis points)
- › Investment split 50% wind and 50% solar photovoltaic.

### Robust backlog supporting faster growth

	Spain	Overseas	Total
High visibility	0.9	3.1	4.0
Advanced development	1.3	3.7	5.0
Initial phases	1.1	2.9	4.0
<b>TOTAL</b>	<b>3.3<sup>6</sup></b>	<b>9.7</b>	<b>13.0</b>

<sup>6</sup> Of which 1.6 GW are grid-connected



<sup>5</sup> Forecasts are subject to change due to the global uncertainty caused by the COVID-19 crisis.



## INFRASTRUCTURE DIVISION

Infrastructure is positioned as a leader in the design, construction and operation of assets and services adapted to the specific needs of each project in the fields of construction, water, concessions and services.

Its organisational structure, based on business units with a high degree of technical specialisation and synergies between them, enables it to cover the entire asset life cycle, favouring end-to-end project development.

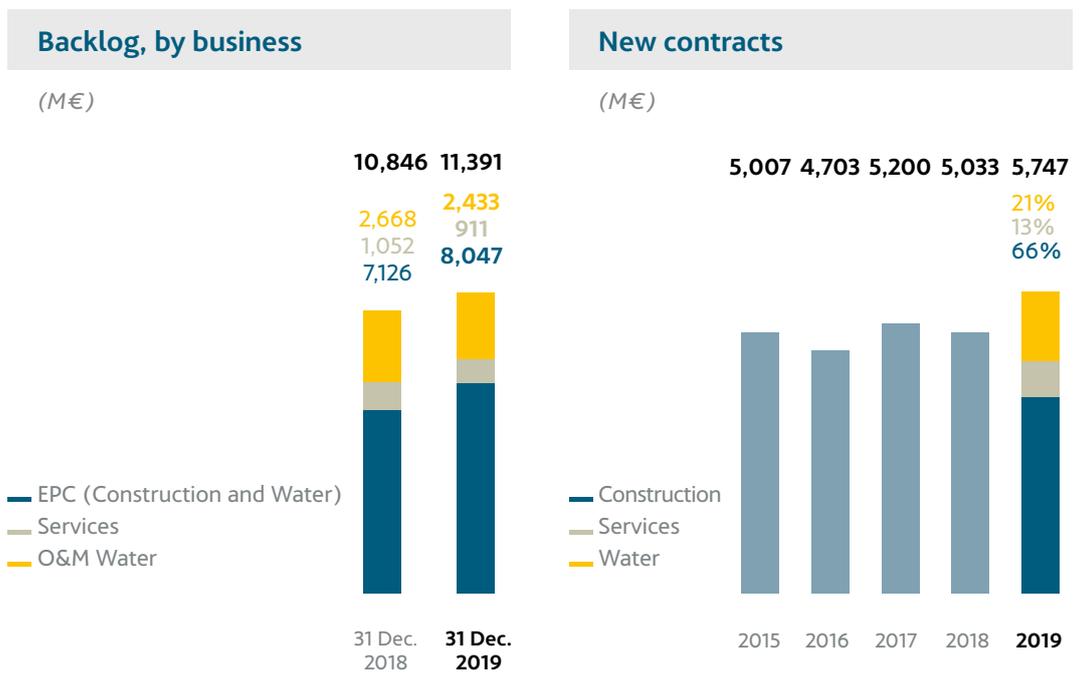
Business	Current position and successes in 2019	Key factors for the future
 <b>Construction</b>	<ul style="list-style-type: none"> <li>› Established international player.</li> <li>› Growing portfolio of projects.</li> <li>› Successful execution/delivery of big international contracts.</li> <li>› Agreement to acquire backlog from Lendlease Engineering; Australia will be the company's largest overseas market.</li> </ul>	<ul style="list-style-type: none"> <li>› Excellence in risk control.</li> <li>› Focus on specialisation.</li> <li>› Concentrated in strategic regions.</li> <li>› Growth in self-performing construction.</li> <li>› Development of a portfolio of large complex projects.</li> <li>› Established lead in Australia.</li> </ul>
 <b>Water</b>	<ul style="list-style-type: none"> <li>› Global leader in desalination.</li> <li>› Start of construction of the Al Khobar and Shuqaiq 3 desalination plants in the Middle East.</li> <li>› Activity on 5 continents, with a growing presence in Southeast Asia.</li> <li>› Leading digital technology in EPC.</li> </ul>	<ul style="list-style-type: none"> <li>› Sustained lead in the desalination industry.</li> <li>› Balanced exposure to the Americas, MENA and Southeast Asia-Pacific.</li> <li>› Focus on BOOT (Build-Own-Operate-Transfer) contracts.</li> <li>› Innovation, control systems and digital technology.</li> </ul>
 <b>Concessions</b>	<ul style="list-style-type: none"> <li>› New lines of business: waste-to-energy, electricity for campuses, transmission lines, ports, etc.</li> <li>› Contract for Sao Paulo Metro Line 6, Brazil.</li> <li>› Investment in Australian waste-to-energy plant.</li> <li>› Inauguration of Toledo Hospital, Toowoomba bypass and Sydney Light Rail.</li> </ul>	<ul style="list-style-type: none"> <li>› Growing backlog due to a sizeable pipeline for the next 3-4 years.</li> <li>› Global focus: Australia, Europe, USA, Canada, Brazil, Colombia, Peru and Chile.</li> <li>› Business diversification.</li> <li>› Larger equity stakes (25-50%) and greater influence in asset management.</li> <li>› Leader/developer role.</li> </ul>
 <b>Services</b>	<ul style="list-style-type: none"> <li>› Scooter sharing: large-scale rollout. Largest or second-largest operator where active.</li> <li>› Energy services (ESCO): strategic remodelling to make this a core business</li> </ul>	<ul style="list-style-type: none"> <li>› Scooter sharing: global solution.</li> <li>› Energy services: development of services for the public and private sectors.</li> <li>› Environment: exploring investments in waste treatment plants.</li> <li>› Innovation and new businesses: exploring opportunities in urban mobility.</li> </ul>

**Infrastructure is a leader in design**

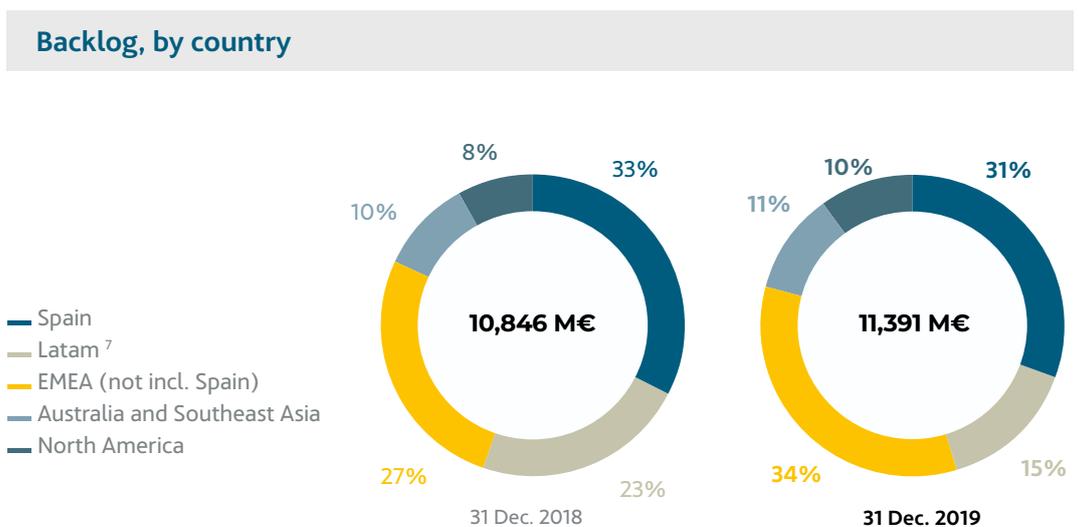
Its organisation structure enables it to cover the entire asset lifecycle, favouring an end-to-end approach to project development

The total value of the division's backlog increased by 5% to 11.4 B€, of which 8 B€ are EPC contracts in Construction and Water.

New contracts in 2019 amounted to a record 5.7 B€. The main milestones were a waste-to-energy plant in the United Kingdom, worth close to 500 M€, a desalination plant in Saudi Arabia worth 400 M, a bridge in Canada worth close to 350 M and another railway project in Norway amounting to 300 M. Between 100 and 250 new contracts were signed in Construction alone, providing for a good level of diversification. Europe and the Middle East increased their share of the backlog.



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<sup>7</sup> Mexico is included in Latam

## LEADERSHIP IN CONVERSATIONS THAT ARE CHANGING THE WORLD

ACCIONA is playing an active role in the main global forums and initiatives focused on sustainable development and the fight against climate change with the goal of marking a path towards global transformation and of raising awareness of these issues.



ACCIONA  
in the forums that are changing the world



Since 2009, ACCIONA has participated in all the UN Conferences of the Parties (COP) on climate change—more than ten to date.

At COP25, held in Madrid in December 2019 and chaired by Chile, ACCIONA played a special role as its headquarters are in Spain. The company participated in a number of forums and meetings at COP25 with the goal of helping to accelerate business's contribution to combating the climate emergency. It also engaged in information and awareness-raising campaigns at several locations in Madrid.

José Manuel Entrecanales, Chairman of ACCIONA, participated in the High-Level Meeting on Climate Change under Caring4Climate. ACCIONA representatives also contributed to the debates at COP25.



### Participation in the World Economic Forum 2020 at Davos

In the framework of the World Economic Forum in Davos (Switzerland), the Chairman of ACCIONA participated in a round table entitled “Providing clean energy in fragile contexts”. The “2020 Global 100 Most Sustainable Corporations” list was published during the Forum, ranking ACCIONA as one of the world’s 100 most sustainable companies for the third consecutive year.



### Attendance at meetings and support for communiqués by CLG Europe

ACCIONA has been part of this initiative since 2009; previously called The Prince of Wales’s Corporate Leaders Group, CLG aims to accelerate progress towards a low-carbon economy by defining specific policies. In 2019, ACCIONA attended a number of CLG Europe meetings and supported various communiqués, notably the letter addressed to EU members in which more than 50 leaders of European companies, including José Manuel Entrecanales, called on the countries to step up the ambition and urgency in fighting climate change and mobilise the necessary investments to decarbonise the economy by 2050.

## ACCIONA in the initiatives that are changing the world

### Member of Climate Action Summit 2019

During the United Nations Climate Action Summit in September 2019, ACCIONA signed the UN’s “Business Ambition for 1.5°C: Our Only Future” manifesto.

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### Caring for Climate | Participation in Caring for Climate

ACCIONA is a member of this platform, launched by the United Nations Environment Programme (UNEP), the United Nations Framework Convention on Climate Change (UNFCCC) and the United Nations Global Compact, which focuses on boosting the role of business in combating climate change and raising awareness among governments and public institutions.



### Member of the United Nations Global Compact

ACCIONA has been an active member of the United Nations Global Compact since 2005, and each year it reaffirms its commitment to the Ten Principles of the Global Compact, based on respect for human rights, labour rights, environmental protection and the fight against corruption, with the aim of achieving of the Sustainable Development Goals (SDGs).

**BUSINESS AMBITION FOR 1.5°C**  **Adoption of the Business Ambition for 1.5°C: Our Only Future manifesto**

ACCIONA signed this manifesto, which promotes limiting the planetary temperature rise to 1.5°C and reaching 'zero emissions' by 2050.

**LCTPI** **Participation in Low Carbon Technology Partnerships Initiative**  
Led by  wbcSD

In the framework of this initiative by the World Business Council for Sustainable Development (WBCSD), ACCIONA is participating in the REscale project to promote the development of long-term corporate renewable energy purchase agreements (PPAs).

 **CARBON PRICING LEADERSHIP COALITION** **Participation in Carbon Pricing Leadership Coalition (CPLC)**

ACCIONA is a member of this coalition, formed by the World Bank Group, which seeks to implement effective carbon pricing systems with a view to reducing carbon emissions and halting climate change. This platform produced the "Report of the High-level Commission on Carbon Pricing and Competitiveness", which is supported by ACCIONA.

**ACCIONA joins Alliance of CEO Climate Leaders**

ACCIONA is a member of this initiative of the World Economic Forum, which promotes the private sector's contribution to the fight against climate change.

# The first company of a new sector

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## Business model

ACCIONA focuses on developing and operating basic infrastructure assets that enable the achievement of the Sustainable Development Goals.

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Earth is facing an increasing number of highly complex challenges. As a result, global and regional initiatives have emerged to respond to these challenges, such as the 2030 Agenda for Sustainable Development, the Paris Agreement and the European Green Deal.

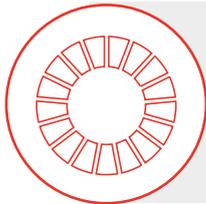
ACCIONA actively contributes to fostering these actions and goes even further by transforming its business model in keeping with the Business as Unusual concept, with a view to “Invest in the planet” and contributing value-added innovative solutions as “Experts in designing a better planet”.

**ACCIONA has transformed its business model in keeping with the Business as Unusual**

concept with a view to “Invest in the planet” and contributing value-added innovative solutions as “Experts in designing a better planet”



GLOBAL CHALLENGES



GLOBAL PRIORITIES CONVERGE IN THE SUSTAINABLE AGENDA



CAPITAL REQUIREMENTS TO RESPOND



ACCIONA'S RESPONSE

## Business as Unusual



### Investing in the planet

- › Capacity to turn ideas into assets
- › Resilient portfolio
- › Competitive financing conditions
- › Appeal of sustainable investment



### Experts in designing a better planet

- › An integrated range of solutions
- › Enhanced impact solutions
- › Positive impact on the planet

## The future is challenging

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### Global scenario

The world's priorities are focused on the Sustainable Development Goals. The journey towards achieving them requires sizeable investment. The funds are there, but there are few market operators with the right capacity and risk structure to respond.

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### GLOBAL CHALLENGES

The major challenges are all interconnected and, hence, require transformative and integrated solutions that take them into account.



#### 1 | Demographic pressure and increased urbanisation

Since 1950, the world population has increased from 2.6 billion to 7.6 billion. This unprecedented demographic pressure has led to new economic and social systems structured around urban centres. The rapid growth of cities and rising migration from the countryside to cities have led to significant changes in people's lifestyles, health and behaviour. This results in emerging challenges, such as sustainable and efficient mobility and proper resource management.

- › **2 billion more people in the world in 2050 compared with 2019** (UN Department of Economic and Social Affairs, *World Population Prospects Highlights*, 2019).
- › **2.5 billion more inhabitants of cities between 2018 and 2050** (UN Department of Economic and Social Affairs, *Around 2.5 billion more people will be living in cities by 2050, projects new UN report*, 2018).
- › **68% of the world's population will live in cities by 2050** (UN Department of Economic and Social Affairs, *World Urbanization Prospects*, 2018).



2

## Climate emergency

The increase in temperatures is having a negative impact on people's lives, on economies and on ecosystems. Global climate change affects natural environments through species loss; extreme weather phenomena, increasing their likelihood, duration and severity; and rising sea levels, leading to flooding in coastal regions.

- › **In 2019, the average global temperature was 1.1°C higher than in the period 1850–1900.** (World Meteorological Organization, *2019 second hottest year on record*, UN confirms, 2019).
- › **415.7 ppm of CO<sub>2</sub> in May 2019**, an all-time record (Mauna Loa Observatory daily CO<sub>2</sub> updates: <https://es.co2earth/>).
- › **71–76% of global CO<sub>2</sub> emissions come from cities** (UN Department of Economic and Social Affairs, *World Urbanization Prospects*, 2018).



3

## Resilient societies

Resilience is a characteristic of successful projects at a time of frequent disruptions. Events that suddenly alter the course of daily life, whether they be pandemics, natural disasters, cyberattacks or other “black swans”. The severity of the health crisis unleashed by Covid-19 has surprised governments, businesses and families alike, but there are threats with comparable impacts and probabilities on the radar. There is a need to build economies and societies that endure over the years and prevail over situations of disruption and extreme uncertainty.

- › **The United Nations estimates that Covid-19 will, in the worst-case scenario, wipe at least 2 trillion dollars off global income** (UN Conference on Trade and Development, *The coronavirus shock: a story of another global crisis foretold and what policymakers should do about it*, 2020).
- › **2018 was the most costly year ever in terms of natural disasters.** Total cumulative costs amounted to almost 160 B USD, of which only half of the assets were insured (Munich RE, *The natural disasters of 2018 in figures*, 2019).
- › **In 2019 to 2023, around 5.2 trillion dollars in global value is at risk of suffering cyberattacks** (World Economic Forum, *This is the crippling cost of cybercrime on corporations*, 2019).



## 4

### Energy transition and increased demand for energy

The use of conventional energy sources, mainly GHG-emitting fossil fuels for electricity, heating and transportation, is the biggest contributor to climate change. This causes air pollution, both indoors and outdoors, which, combined with greater global demand for energy, has harmful effects not only on the environment but on human health.

- › **By 2050, it is estimated that demand for energy will increase between 20% and 50% compared with 2010** (Intergovernmental Panel on Climate Change, IPCC Special Report, 2019). More than 60% of global GHG emissions come from this sector (International Renewable Energy Agency, *NDCs in 2020, Advancing renewables in the power sector and beyond*, 2019).
- › **3 billion people still rely on direct combustion of fuel** for cooking and heating (UN Sustainable Development Goals, *Ensure access to affordable, reliable, sustainable and modern energy*, 2019)
- › **Indoor air pollution resulting from a lack of access to modern energy technologies causes 3.8 million deaths every year** (World Health Organization, *Household air pollution and health*, 2018).



## 5

### Change of economic model towards a circular economy

At present, humanity uses the equivalent of 1.75 Earths to provide the resources we use and absorb all the waste generated by the existing economic model, according to the *Global Footprint Network*. Consequently, it is vital to redefine global economic growth processes and put an end to the linear industrial model based on extraction, production and waste generation. In light of this situation, the circular economy has emerged as a means to maintain the value of products, materials and resources in the economic system for as long as possible.

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- › **91% of the current economy is still linear, based on extraction, production and waste generation** (Circle Economy, *The Circularity Gap Report*, 2020). This model consumes the planet's resources 75% faster than nature is able to regenerate (Global Footprint Network, *Ecological Footprint: Managing our Biocapacity Budget*, 2019).
- › **45% of all global emissions correspond to materials, products and food** (industry and agriculture) (Ellen MacArthur Foundation, *Completing the Picture – How the Circular Economy Tackles Climate Change*, 2019).
- › **90% of negative environmental impacts on soil and water resources are due to the extraction of resources and their processing** (Ellen MacArthur Foundation, *Completing the Picture – How the Circular Economy Tackles Climate Change*, 2019)..



## 6

Water scarcity  
and water stress

Almost half of the world's population is affected by water shortages, and that figure will likely rise due to global warming. According to the Nationally Determined Contributions under the Paris Agreement, water is the sector most vulnerable to climate change, due to the changes in its distribution and the decrease in the availability and quality of water resources. The IPCC reports that a 1.5°C rise in the global temperature would increase the frequency and scale of floods and droughts, resulting in water stress.

- › **3.5 billion people could face water scarcity in 2025** (The World Bank, *Water Resources, Improving Services for the Poor*, 2019).
- › **50% of the population will live in areas of high water stress in 2030** (Intergovernmental Panel on Climate Change, *IPCC Special Report*, 2019), which means that 1.2 billion people will face water scarcity (UN Water, *Water Scarcity*, 2014).
- › **29% of the world's population do not have access to safe drinking water** (UN-Water, *the United Nations World Water Development Report*, 2019). The contamination of drinking water causes more than 502,000 deaths every year (World Health Organization, *Water*, 2019).



## 7

## Social inequalities

The last few decades have seen unprecedented economic progress worldwide. However, that progress has not been equitable, and has generated major inequalities in society. Beyond income and wealth, this disproportion has had an impact on the opportunities to improve living standards, whether in education, housing, and life expectancy of employment prospects. Factors like gender, age and the places where people live, when determined by social infrastructure, also have a strong impact on people's socio-economic status and their future prospects.

- › **6% of the world's population will continue to experience extreme poverty in 2030** (UN meeting coverage and press releases, *Rural Population 'Left Behind' by Uneven Global Economy*, 2019). Almost 9 out of every 10 people in Sub-Saharan Africa will be living below the poverty threshold in 2050 (The World Bank, *Poverty Report*, 2019).
- › **10% of the population lives on \$1.90 a day** (The World Bank, *Poverty Report*, 2019), while the world's 85 richest people have the same wealth as the poorest half of humanity (Oxfam, *Even it up: Time to end extreme inequality*, 2019).
- › **82% of all wealth created in 2017 went to the top 1%** (Oxfam, *Reward Work, Not Wealth*, 2018).

## GLOBAL PRIORITIES CONVERGE IN THE SUSTAINABLE AGENDA

The prevailing global challenges in the current economic, environmental and social reality have established the basis on which to design new strategies and initiatives for the planet. The roadmap to fulfil these future commitments focuses on achieving sustainable development, combating climate change and attaining sufficient financing to make this possible.



### 28 The Sustainable Development Goals

In order to respond to the main global challenges, in September 2015, 193 member countries of the UN General Assembly launched the 2030 Agenda for Sustainable Development, which comprises 17 Sustainable Development Goals (SDGs), 169 specific targets and 232 official indicators to gauge progress. The aim of the SDGs is to eradicate poverty, protect the planet and ensure prosperity for all, as part of a new sustainable development agenda.

The SDGs are applicable in every country in the world, and are an evolution of the Millennium Development Goals (MDGs), which applied only to the least developed countries and were aimed at eradicating extreme poverty between 2000 and 2015. The SDGs seek to promote integrated solutions, to prevent policies or projects aimed at achieving one goal from having unwanted consequences on the attainment of others.

### Global climate agenda

Governments have responded to the concern of scientists and civil society over the current and future climate situation through numerous international initiatives. Notable among these are SDG 13 – Climate Action, the Paris Agreement following the 21st United Nations Climate Change Conference (COP21) in 2015, and the European Union's Green Deal, announced at COP25.

Within the framework of the 2030 Agenda for Sustainable Development, SDG 13 – Climate Action focuses on urgent measures that must be adopted to combat climate change and its effects. The United Nations Framework Convention on Climate Change (UNFCCC) is the leading international forum for discussing solutions to the climate threat.

The Paris Climate Agreement was signed by 196 countries after the UNFCCC hosted COP21 in Paris. Of these, 187 countries have since ratified the agreement, with the aim of strengthening the commitment to fight climate change, limiting global warming to 2°C above pre-industrial levels and doing everything possible to ensure it does not exceed those levels by more than 1.5°C.

Countries' plans to achieve the goals of the Paris Agreement are set out in their Nationally Determined Contributions (NDCs), implementation of which commences in 2020. These programmes outline how each country must progress in terms of investments and developments in order to mitigate their emissions and help curb climate change. The NDCs include measures such as the promotion of sustainable infrastructure and renewable energy.

At COP25, held in Madrid, the European Commission unveiled the European Union Green Deal with the aim of becoming the first carbon-neutral continent by 2050. This integrated initiative includes all measures and policies necessary for that purpose, from an initial roadmap to reduce greenhouse gas emissions to the resulting investments in research and development.

Furthermore, this agreement is part of the European Commission's strategy for achieving the Sustainable Development Goals. According to the World Bank, the energy transition could generate almost 23 B€ in global profits through 2030 and could create 24 million jobs worldwide.

## CAPITAL REQUIREMENT TO RESPOND TO THE CHALLENGES

### Investment gap in sustainable infrastructure

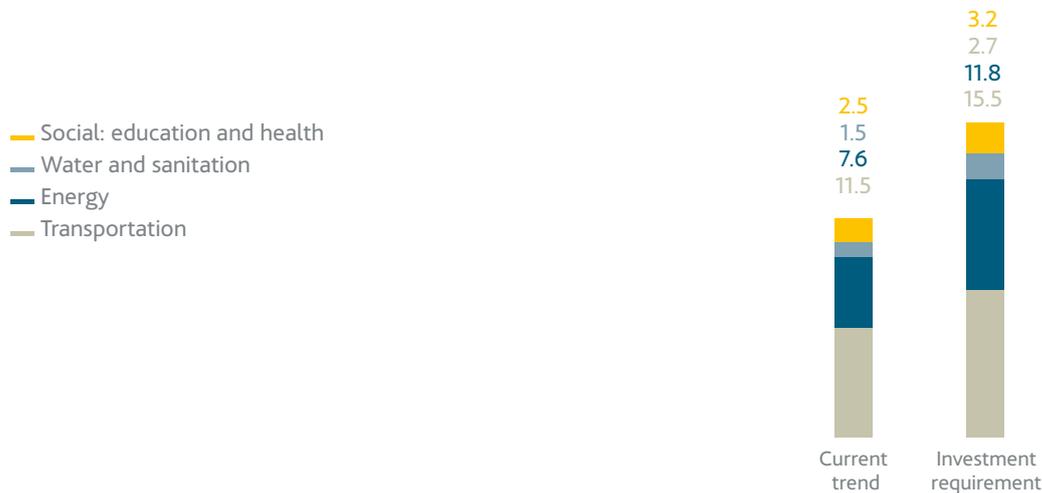
The United Nations estimates that annual investment of between 5 and 7 trillion USD will be required worldwide to fulfil the aims of the 2030 Agenda of the SDGs. Moreover, infrastructure makes a decisive contribution as an explicit part of SDG 9: "Build resilient infrastructure, promote inclusive and sustainable industrialisation, and foster innovation".

However, the positive impact of infrastructure on sustainable development goes even farther. According to a paper published in *Nature Sustainability* in April 2019, infrastructure directly or indirectly influences 121 of the goals of the 2030 Agenda, i.e. 72% of the 169 targets.

According to a report by the Afi (Spanish finance consultancy firm), some 10.240 B USD in total additional investment in new infrastructure is required in the 2019–2030 period to attain the SDGs. This figure includes 4.238 billion dollars in energy, 4.095 B USD in transportation, 1.222 B USD in water and sanitation, and 616 M USD in education and health infrastructure. These forecasts apply to countries in America, Africa and Asia.

### The current trend and cumulative investment in infrastructure needed from 2019 to 2030

(B USD)



The SDGs and the Paris Agreement require the global community to invest more than 7.6% of global GDP every year from 2015 to 2030. Since the annual investment in infrastructure currently stands at 5.5% of global GDP, there is a worldwide shortfall of 2.1% of GDP. This investment effort is only possible through the involvement of the private sector. In addition, financial markets have great potential to help this transition towards a green, low-carbon, climate-resilient economy.

Public funds are not sufficient to provide the investment needed to achieve the global goals. Multilateral development banks are not mobilising sufficient funding, and national banks and other financial institutions for development are covering just 1.2% of the global need. Although private funds have the capacity to provide the annual investment required by the SDGs, the flow of private capital in G20 countries towards sustainable infrastructure accounts for only 0.5% of the total global need. The private sector plays a pivotal role due to the application of environmental, social and governance (ESG) criteria in its investments, on account of the opportunity to channel this private capital towards an economic transition that is fair, equitable and low-carbon.

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### Measures to foster sustainable investment

In the last few years, stable plans and policies have been implemented to offer a scenario of long-term certainty. These include platforms to help governments prepare projects that will attract funding, and plan and design quality infrastructure that maximises the positive impact on society. Aware that, to lead the transformation towards a low-carbon economy, it is necessary to foster sustainable finance. In 2016 the European Commission created the High-level Expert Group (HLEG) on Sustainable Finance, an instrument to put forward suggestions with respect to the policies and procedures in application of sustainable investments.

The HLEG's recommendations are the basis for the Action Plan on Sustainable Finance, adopted by the European Commission in March 2018. This plan includes ten principles to help connect the world of financial services and the needs of a sustainable economy. One of them is the definition of a taxonomy of low-carbon, sustainable activities, developed by the Technical Expert Group (TEG) on Sustainable Finance, set up by the European Commission for this purpose.

The taxonomy enables capital markets to identify and respond to investment opportunities that contribute to attaining the carbon emission reduction goals. There was previously no comparable classification system, at either global or European level, to define the requirements or criteria for an economic activity to be considered sustainable.

The new taxonomy articulates the strategy towards a low-carbon economy by means of three main goals: improving the financial sector's capacity to participate in combating climate change, driving the development of a single market in green financial services, and protecting EU consumers from "greenwashed" financial products. The taxonomy classified economic activities into seven macro-sectors, according to the European Classification of Economic Activities (NACE). Its methodology and criteria were designed to identify the areas that contribute substantially and significantly to the environment, excluding all those that are significantly harmful to it. Its six environmental objectives are:

1. Climate change mitigation.
2. Climate change adaptation.
3. Sustainable use and protection of water and marine resources.
4. Transition to a circular economy, waste prevention and recycling.
5. Pollution prevention and control.
6. Protection of healthy ecosystems.

Through the Green Deal, the European Union aims to unlock at least 1 trillion euros in sustainable investment in the next decade. Moreover, together with other bodies, in October 2019 it launched the International Platform on Sustainable Finance (IPSF), within the framework of the International Monetary Fund and the World Bank.

## Connecting supply and demand in the global market

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Infrastructure investment is close to a peak worldwide, representing an excellent opportunity for development in the twenty-first century, and is currently the backbone of international agreements and dialogues.

This lack of connection between the available capital (supply) and the need for investment (demand) is a sign of the existence of barriers that hamper the flow of funds to sustainable infrastructure. There are multiple obstacles facing developers and financiers trying to carry out viable projects. Each of them contributes differently to the investments' risk profile and varies according to each infrastructure's stakeholders (users, governments, operators, investors and others).

This global shortfall can only be addressed by means of a massive injection of public and private capital, in which public and private investors share the risks. Only a few operators have the right technical capacity, international presence and balance sheet structure to connect supply and demand, in light of the challenge of the decade, which is to transform the production model to ensure that it is sustainable in the future.

## Business as Unusual

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### A different way of doing business

Going beyond the conventional industry classifications, ACCIONA belongs to a new sector that responds to the need for transformation and progress in society, in line with the goals of the 2030 Agenda.

ACCIONA proposes a different way of doing business. Its Business as Unusual formula is grounded in a range of solutions that foster transformation and a positive impact on the community and the planet.

This positions ACCIONA as **the first company of a new sector**. It belongs to an exclusive group of infrastructure developers that not only invest in the assets they build and operate, but also orient their strategy towards the needs and opportunities deriving from the energy transition and the Sustainable Development Goals (SDGs).

## CONNECTING SUPPLY AND DEMAND

### ACCIONA ...

**... is one of the few operators, or the only one,** with the right technical capacity, international presence and balance sheet structure to connect supply and demand and address the challenges underlying the SDGs and make integrated solutions happen,

**it is the leading greenfield developer and operator** of essential energy and infrastructure assets to provide solutions to the challenges of sustainable development,

**it belongs to an exclusive group of infrastructure developers** that invest in the assets they build and operate, thereby aligning with the long-term global sustainability production model, **and**

**it has a competitive position,** as it is the first company in a new sector focused on key activities for growth in the next few decades.

In other words,  
**Business as unusual** is:

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### Investing in the planet

- › Capacity to turn ideas into assets
- › Resilient portfolio
- › Competitive finance conditions
- › Appeal of sustainable investment



### Experts in designing a better planet

- › An integrated range of solutions
- › Enhanced impact solutions
- › Positive impact on the planet

## Investing in the planet

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### Connecting the supply of capital to sustainable assets

ACCIONA is in a privileged position to identify opportunities and turn innovative ideas into attractive infrastructure assets for sustainable global growth.

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The complexity and connection between the global goals of the 2030 Agenda mean that the challenges cannot be tackled efficiently by the conventional industries (business as usual). The problems posed by issues such as water, climate change or mega-cities, for example, need a new approach to landmark projects, in addition to solutions that integrate capital, talent, technique and technology from an innovative perspective.

ACCIONA does not see itself as a construction company that has diversified into the energy business, or an energy company with a legacy in the construction business. Rather, it is a company in a new industry whose strategy and solutions focus on the development needs and opportunities arising from the sustainable agenda defined by the SDGs and the transition to a low-carbon economy.

From the outset, ACCIONA has always pioneered a different way of doing business, responding to the main global challenges in order to help create more resilient societies and design a better planet.

## CAPACITY TO TURN IDEAS INTO ASSETS

The capacity to understand global challenges, in combination with capital availability, place ACCIONA in a privileged position to identify opportunities and turn innovative sustainable development ideas into highly profitable assets. ACCIONA's skill in the development of infrastructure assets is one-of-a-kind. It is one of the few global operators able to understand and meet the needs and opportunities posed by the sustainable agenda, and transform its challenges into attractive infrastructure assets that contribute to sustainable and inclusive growth.

Throughout its history, ACCIONA has shown an unrivalled capacity to develop opportunities linked to real and profitable needs, based on multiplying the positive impact of sustainable development models in infrastructure. The more delocalised the business opportunities and the more complex they are, the greater is the need for technical experience and quality management.

## RESILIENT, BALANCED PROJECT PORTFOLIO

ACCIONA manages a stable, predictable and growing business, with a resilient project portfolio that has a balanced risk-return profile. This enables ACCIONA to maintain a strong competitive position and a solid capital structure which it uses to constantly seek value-added opportunities.

ACCIONA's balanced risk profile is due to its greenfield portfolio, which comprises projects with development risk, thus high return in the short term, which generate liquidity for the company to invest in new projects. This process for selecting projects and investments contributes value for shareholders and investors alike. ACCIONA is also committed to brownfield assets which, due to their lower risk, provide investors with generated greater security, bolstering solvency and creating a portfolio in which risk is balanced between greenfield and brownfield endeavours. For example, subways in cities contribute recurring cash flows that help keep capital flowing for reinvestment over the long term in greenfield projects.

ACCIONA's activities are configured on the basis of the three risk profiles from which its operating income stems, from lowest to highest risk:

### Risk profiles



## PIONEERS IN SUSTAINABLE FINANCE PRODUCTS

ACCIONA uses two sustainable finance mechanisms: finance earmarked for projects or activities with sustainable objectives aimed at fostering specific positive impacts linked to the finance, and corporate finance that entails commitments to improve ACCIONA's ESG performance.

## ACCIONA's sustainable finance operations

Type of finance	No. of ongoing transactions	No. of transactions arranged in 2019	Amount currently ongoing
Financing earmarked for projects	12	8	891.3
Corporate financing linked to sustainable commitments	5	5	3,702.7
<b>TOTAL</b>	<b>17</b>	<b>13</b>	<b>4,594.0</b>

We highlight the following significant operations over the course of the last year:

› **First sustainable syndicated loan** (ESG Syndicated Loan) for 675 M€

› **The first loan linked to sustainability objectives** in the Chilean market, for 30 M USD

In 2019, ACCIONA devised a new framework on green finance, aligned with the European sustainable investment strategy, in particular, with the EU's Technical Expert Group (TEG), which has produced the European Green Bond Standard. This new framework was reviewed by Sustainalytics which, in addition to certifying its conformity with the framework of the European Union, issued a Second-Party Opinion (SPO).

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In both cases, the company's investment is linked to its commitment to developing the sustainable agenda, including renewable energy, access to water and sanitation, sustainable mobility, the circular economy, and adaptation to climate change.

Moreover, the group receives financing linked to compliance with environmental, social and corporate governance (ESG) improvement goals. In 2019, ACCIONA pegged the interest rate of this financing to its score in the RobecoSAM Corporate Sustainability Assessment, and has fulfilled its targets to date.

⊕ See Appendix II for more information on ACCIONA's green financing and the projects to which it is assigned. See also ACCIONA's website:

<https://www.acciona.com/sustainability/sustainable-finance/>

## ATTRACTING SUSTAINABLE INVESTMENT

ACCIONA's business model is focused on sustainability and its balanced, resilient project portfolio make the company a global standard-bearer in the sector. Because of this approach, potential investors choose ACCIONA over other companies.

In 2019 ACCIONA also classified its activities in accordance to the criteria established for the European Union taxonomy of sustainable finance. It was also the first company to publish its degree of alignment with the exacting parameters established in the taxonomy.

## The European Commission taxonomy for sustainable finance

The low-carbon taxonomy is a tool devised by the European Commission in order to help investors, companies, issuers and project developers to navigate the transition towards a low-carbon economy in a more efficient way. The taxonomy establishes performance thresholds (known as "technical screening criteria") for economic activities that:

- › **substantially contribute to one** of the six environmental objectives
- › **do no significant harm** (DNSH) to other environmental objectives;
- › **comply with minimum safeguards** (for example, the OECD Guidelines for Multinational Enterprises and the UN Guiding Principles on Business and Human Rights).

The EU taxonomy is one of the most significant developments in sustainable finance and it will have far-reaching implications for investors and issuers working in the EU and beyond.

The result of this analysis, which has been reviewed externally by the company's financial auditor, confirms ACCIONA's lead in sustainability, verifying that 93% of CAPEX, 83% of EBITDA and 58% of revenues are within the established requirements.

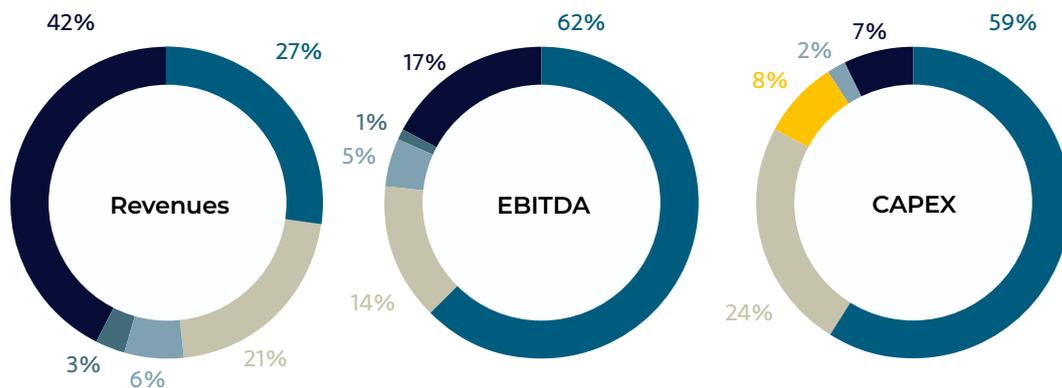
Notable among the activities that contribute to these figures are:

- › The construction and operation of 100% renewable energy production and transmission facilities: wind, photovoltaic, hydropower, biomass and solar thermal.
- › The construction of low-carbon transport infrastructure, mainly urban and inter-city rail infrastructure.
- › Wastewater treatment and the efficient supply of drinking water, especially in regions that experience water stress.
- › The construction and development of buildings with green building certification.
- › The operation of mobility services that use 100%-renewable electricity.
- › Deployment of energy efficiency services.
- › Provision of waste management services oriented towards reuse.

## The EU taxonomy is one of the most significant developments in sustainable finance and it will have far-reaching implications

The result of this analysis, which has been reviewed externally by the company's financial auditor, confirms ACCIONA's lead in sustainability, verifying that **93% of CAPEX, 83% of EBITDA and 58% of revenues** are within the established requirements

### Classification of ACCIONA's activities in accordance with the EU's low-carbon taxonomy



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- Supply of electricity, gas, steam and air conditioning
- Transportation and storage
- Manufacturing
- Water, sewerage, waste and remediation
- Construction and real estate activities
- Agriculture, forestry and fisheries
- Activities not included in the taxonomy

⊕ More information on the European low-carbon activities taxonomy here:  
[https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance\\_en](https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance_en)

<b>Classification of ACCIONA's activities in accordance with taxonomy</b>	<b>% annual CAPEX aligned with taxonomy</b>	<b>% EBITDA aligned with taxonomy</b>	<b>% Revenues aligned with taxonomy</b>
<b>Supply of electricity, gas, steam and air conditioning:</b>	<b>58.7</b>	<b>62.4</b>	<b>26.8</b>
Electricity production: wind	48.36	54.29	15.85
Electricity production: photovoltaic	10.45	2.72	3.21
Electricity production: hydropower	0.80	2.74	4.60
Electricity production: solar thermal	-0.95	0.59	0.33
Electricity production: bioenergy	0.08	2.04	2.71
Power transmission and distribution	0.00	0.03	0.08
<b>Transportation and storage</b>	<b>24.3</b>	<b>14.2</b>	<b>21.4</b>
Infrastructure for low-carbon transport	22.09	14.34	21.34
Commercial vehicles and passenger cars	2.21	-0.16	0.07
<b>Water, sewers, waste and remediation</b>	<b>2.0</b>	<b>4.5</b>	<b>6.3</b>
Centralised wastewater treatment systems	0.68	2.06	2.92
Water collection, treatment and supply	0.36	1.66	2.21
Separate collection and transport of non-hazardous waste in source-segregated fractions	0.96	0.84	1.16
<b>Construction and real estate activities</b>	<b>0.6</b>	<b>1.5</b>	<b>3.1</b>
Construction of new buildings	0.22	1.28	2.69
Acquisition of buildings	0.00	0.00	0.00
Individual measures for refurbishment, installation of renewables on site and professional, technical and scientific activities	0.38	0.20	0.36
<b>Manufacturing</b>	<b>7.8</b>	<b>0.0</b>	<b>0.0</b>
Low-carbon technology manufacturing	7.80	0.00	0.00
<b>Agriculture, forestry and fisheries</b>	<b>0.1</b>	<b>0.2</b>	<b>0.2</b>
Perennial crops	0.06	0.20	0.23
<b>TOTAL included in the taxonomy</b>	<b>93</b>	<b>83</b>	<b>58</b>

## Experts in designing a better planet

The future is challenging 00  
Business as Unusual 00  
Investing in the planet 00  
Experts in designing  
a better planet 00

### Innovative, responsible, progress-generating solutions

The company offers solutions that respond to the challenge of developing infrastructure, products and services to fulfil the Sustainable Development Goals. Any proposed solution must have a positive environmental impact and provide growth while being both sound and profitable.

#### **ACCIONA'S SMART SOLUTIONS AS A RESPONSE TO THE GLOBAL CHALLENGES**

Through the SMART approach of its business model (Sustainability, Mitigation, Adaptation, Resilience and Transformation), ACCIONA has developed a broad range of innovative, responsible and progress-generating solutions that allow for a comprehensive response to the challenges facing the planet.

Through SMART solutions, ACCIONA anticipates the challenges and contributes to mitigation and adaptation in each business, process and project, under a strategic vision. These solutions are capable of converting conventional projects into assets that multiply their value for society in fundamental aspects such as energy, transport, water and social infrastructure, to name just a few of the areas in which the company contributes.

# ACCIONA Solutions map



## ENERGY SOLUTIONS

- › Wind power
- › Solar photovoltaic
- › Hydroelectricity
- › Renewable thermal: biomass and solar thermal
- › Flexibility and new energy solutions
- › Sale of energy
- › Energy services
- › Operation and maintenance of renewable assets
- › EPC for third parties
- › Distributed generation



## TRANSPORT SOLUTIONS

- › Highways
- › Bridges and tunnels
- › Railways
- › Underground and light railways
- › Ports and water channels
- › Airports
- › Airport services
- › Operation and maintenance of transport infrastructure
- › Railway services
- › Freight forwarding
- › Data centres
- › Substations and transmission lines



## WATER SOLUTIONS

- › End-to-end water management
- › Desalination
- › Wastewater treatment
- › Purification
- › Reuse
- › Water services for cities



## SOCIAL SOLUTIONS

- › Healthcare
- › University campuses
- › Ecosystem regeneration
- › Museums and the arts
- › Universal and international exhibitions
- › Event design and management



## SOLUTIONS FOR CITIES

- › Electric mobility
- › Waste management
- › Waste to energy
- › Urban ecosystems
- › Efficient building



## REAL ESTATE SOLUTIONS

- › Housing
- › Offices
- › Hotels and tourist resorts
- › Industrial properties



## OTHER SOLUTIONS

- › Bestinver
- › Grupo Bodegas Palacio 1894



## ENERGY SOLUTIONS

### ACCIONA is **the world's largest renewables-only energy operator**

The company owns and operates more than 10 GW of generating facilities — onshore wind, photovoltaic, biomass, hydroelectric and solar thermal — in 16 countries on 5 continents, enabling it to produce around 23,000 GWh in 2019, equivalent to the electricity consumption of about 7 million households.

ACCIONA was a forerunner and a key player in the initiation and development of the renewables industry worldwide. After 30 years of experience and with no legacy in fossil energy, ACCIONA headed Energy Intelligence's Top 100 Green Utilities for the 5th consecutive year as the world's largest 100% renewable energy company.

Its profile is unique in the sector, with a long-term vocation encompassing all the activities in the energy value chain (from development, engineering and construction through operation and maintenance of energy infrastructures, to energy supply and sale), helping to build a fully sustainable energy system based on renewables.

ACCIONA invests and operates responsibly, guaranteeing stability, permanence and the creation of long-term socio-economic and environmental value in the regions where it operates. It does this firstly through the positive impact of its activity. It also undertakes social initiatives in association with its projects, which benefited more than 227,700 people in 2019 through more than 200 projects. It also has lower accident rates among employees and subcontractors at a key time when the company is fully engaged in building more renewable capacity than ever before.

ACCIONA's social commitment extends to rural areas that have difficulty accessing the conventional electricity grid. In this line, it has a sustainable business model of distributed generation and residential systems with which it provides access to electricity to all electricity demand profiles.

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The company also works day after day on cutting-edge energy solutions that can provide progress in decarbonising the system. For that reason, it uses innovation and seeks to improve technology so as to enhance its facilities' useful life and performance, including solutions such as hybridisation and storage, as well as advancing technologies of the future, such as green hydrogen. In pursuit of energy solutions for a more sustainable future, ACCIONA increased investment in innovation to 75.4 M€ in 2019.

ACCIONA plays a proactive role in decarbonising the economy while maintaining growth that is profitable, orderly and diversified in terms of customers and installed capacity, with more than 1.1 GW of renewables under construction or approved for construction in 2020.

### ACCIONA has **over 30 years' experience** in clean energy solutions

### Global challenges met by energy solutions

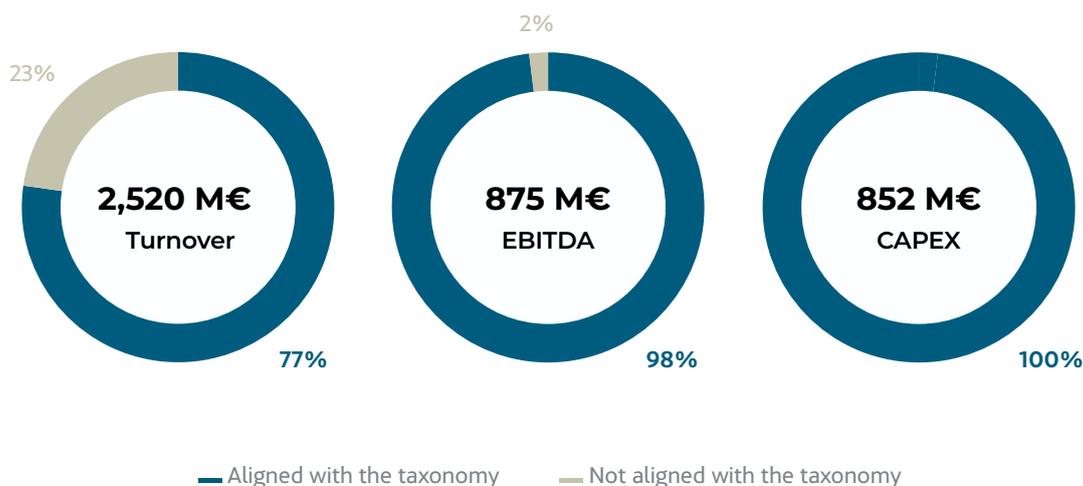
- › Population pressure and urban concentration.
- › Climate emergency.
- › Change of the economic model towards a circular economy.
- › Energy transmission and growing demand for energy.
- › Social inequality.

### Need for investment in energy solutions between 2019 and 2030 to achieve the SDGs



Source: AFI

## Key figures



The European taxonomy is a classification tool developed by the European Commission in order to identify activities that contribute significantly to the decarbonisation of the economy. The information refers to fiscal 2019 and was independently reviewed by the company's auditor, whose report is available at <https://www.acciona.com/sustainability/sustainable-finance/>



### Main taxonomy-related factors <sup>8</sup>

- › Energy production facilities must have total life-cycle emissions of less than 100 gCO<sub>2</sub>e/kWh, falling steadily to 0 gCO<sub>2</sub>e/kWh in 2050.

<sup>8</sup> The technical report on the European Taxonomy is available at: [https://ec.europa.eu/info/sites/info/files/business\\_economy\\_euro/banking\\_and\\_finance/documents/200309-sustainable-finance-teg-final-report-taxonomy\\_en.pdf](https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/200309-sustainable-finance-teg-final-report-taxonomy_en.pdf)

### Emissions avoided due to the production of renewable electricity in 2019

Responding to the current climate emergency, ACCIONA avoided 13,099,944 tCO<sub>2</sub>e in 2019 by generating renewable electricity, which is equivalent to approximately double the total annual emissions by the city of Madrid. The energy sector is responsible for two-thirds of total CO<sub>2</sub> emissions, with renewable energy being the most effective solution for mitigating climate change.

Country	Installed capacity (MW)	Output (GWh)	Emissions avoided (tCO <sub>2</sub> e)
Australia	435	1,234	1,081,251
Canada	181	479	345,470
Chile	542	735	574,851
Costa Rica	50	267	195,864
Croatia	30	82	43,338
USA	930	2,284	1,463,226
Egypt	186	329	159,085
Spain	5,678	12,791	6,043,527
Hungary	24	51	33,430
India	164	396	355,922
Italy	156	257	126,668
Mexico	1,144	2,864	1,663,956
Poland	101	244	200,238
Portugal	165	405	23,827
South Africa	232	538	537,119
Ukraine	100	40	39,172
<b>TOTAL</b>	<b>10,117</b>	<b>22,994</b>	<b>13,099,944</b>

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### Life-cycle analysis (LCA) of renewable power facilities in order to reduce emissions

It is important for ACCIONA to have indicators that reflect its facilities' performance throughout their life cycle with the aim of increasing efficiencies and further reducing its carbon footprint. For this reason, in 2019 it performed seven life cycle analyses (LCAs) in renewable production facilities.

The company has implemented a new tool for analysing these indicators, enabling it to identify specific areas for improvement in each project type and optimise the impact.

An example of this is the change of foundation at the Palmas Altas wind farm (2019), which reduced CO<sub>2</sub>e emissions by 20% per kWh generated with respect to the Mt. Gellibrand (2018) wind farm and by 23% with respect to the Bannur wind farm (2017). This means a reduction of 27,900 tCO<sub>2</sub>e over the project's life cycle.



## 2019 Milestones

- › **Fulfilment of the company's public commitment in connection with renewable installed capacity:** the COP21, held in Paris in 2015, ACCIONA undertook to invest more than 2,000 M€ in renewable energy between 2016 and 2020 in order to attain a total capacity of 10,500 MW. In 2019, following the sale of 250 MW of solar thermal capacity in Spain in 2018, the company's installed capacity amounted to 10,117 MW. The company currently has more than 1.1 GW under construction or approved, which will enable it to exceed the target.
- › **Significant progress in construction of renewable energy facilities:** in line with its strategy of profitable and sustainable growth, in 2019 the company concluded the construction of renewable energy facilities in Chile and United States, as well as in Egypt and Ukraine, and began the construction of new projects in Chile, Mexico, the United States and Australia.
- › **Acquisition of a portfolio of projects under development in the United States:** in 2019, ACCIONA acquired from Tenaska a portfolio of projects under development in the United States – 3,000 MW of solar photovoltaic and 1,000 MW of storage capacity – which will enable the company to grow in one of its key geographies.
- › **Solid growth in the supply of electricity to wholesale customers and in long-term corporate power purchase agreements (PPAs):** in 2019, ACCIONA obtained major renewable energy supply contracts, such as the supply of high-voltage electricity to all Aena airports in the Iberian peninsula in 2020. Its corporate PPAs include notably a long-term renewable energy agreement with ECONSSA in Chile.
- › **Twenty-fifth anniversary of ACCIONA's first wind farm:** El Perdón (Navarra, Spain) was the first commercial wind installation in Spain and the company's first wind farm. It maintains optimal performance ratios and is an example of the company's excellence in operation and maintenance, based on its long-term vision of asset management.
- › **At the forefront of innovation in renewable technologies:** projects in 2019 included the creation of an innovation hub for photovoltaic technologies at the El Romero Solar plant in the Atacama desert (Chile), with the aim of testing new photovoltaic technologies that may increase facilities' efficiency and performance.
- › **Pioneers in ensuring traceability of electricity's renewable origin:** the company has begun to implement GREENCHAIN® technology, which uses blockchain to ensure traceability of electricity from origin to final consumption, ensuring that 100% of the energy supplied is of renewable origin. ACCIONA also promoted the development of Climate Trade, the world's first blockchain-based carbon rights trading platform, created by Spanish start-up Climate Blockchain Initiatives.
- › **Introduction of new clean energy solutions required for decarbonisation:** ACCIONA is in the process of building Europe's largest hydrogen plant and an adjoining photovoltaic plant that will supply the electricity required to produce green hydrogen.

### Pipeline of company-owned assets under construction or approved for construction

ACCIONA has extensive experience in the design, construction and operation of renewable energy assets, with a model of guaranteed growth over time. The company owns 10 GW of installed capacity and aims to reach 15 GW by 2024<sup>9</sup>, based on a pipeline of 13 GW under development.

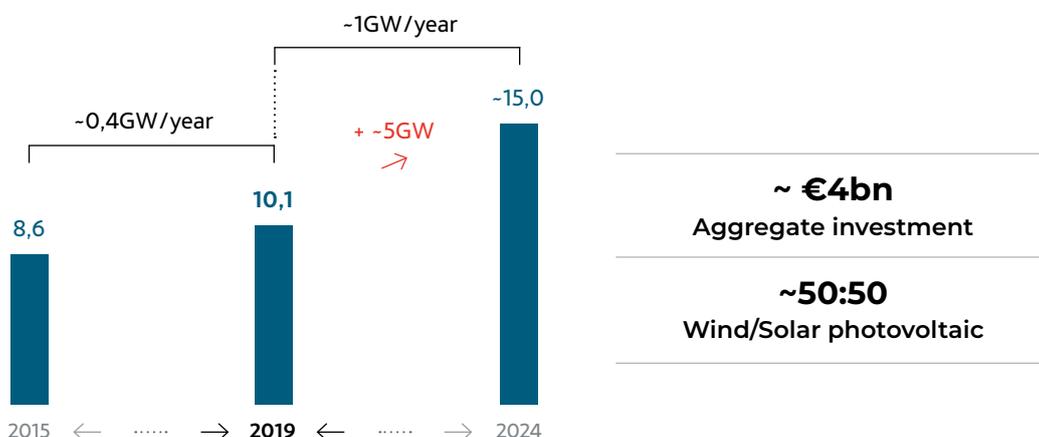
The company plans to install 1 GW per year between 2020 and 2024, compared with an average of 0.4 GW per year between 2015 and 2019. This will accelerate its growth as it is optimally positioned to take advantage of expansion in renewables.

#### Assets under construction or approved for construction

Asset	Solution	País	Capacity (MW)
Usya	Photovoltaic	Chile	64
Tolpán	Wind	Chile	78
Santa Cruz	Wind	Mexico	139
San Carlos	Wind	Mexico	198
Mortlake	Wind	Australia	158
Chalupa	Wind	USA	198
Celada 3	Wind	Spain	48
Veladillo	Wind	Spain	27
Malgarida	Photovoltaic	Chile	226
<b>TOTAL</b>			<b>1,136</b>

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#### Assets under construction or approved for construction



<sup>9</sup> Forecasts are subject to change due to the global uncertainty caused by the COVID-19 crisis.



**7,997 MW**  
ACCIONA-owned

**225**  
Wind farms

**6.260**  
Wind generators

**15**  
Countries

ACCIONA ranks #7 in the world in terms of company-owned installed capacity<sup>10</sup>. It is a leading player in the development, construction, operation and maintenance of wind power facilities and played a fundamental role in the creation and development of the wind industry. Its leading position and industry knowledge are due to its extensive experience as a global supplier of products and services in all areas of the value chain.

ACCIONA pioneered the development of wind turbines using proprietary technology through ACCIONA Windpower (AWP), which quickly positioned itself among the world's leading wind turbine manufacturers. Since its first mass-produced wind turbine came off the assembly line in 2004, ACCIONA has experienced considerable growth in wind power output. In 2015, before the merger with Nordex, AWP had four nacelle assembly plants (two in Spain, one in the United States and one in Brazil) and another under construction in India. In total, it had manufactured and had orders for 6.7 GW of wind turbines, for more than 100 wind farms in 18 countries.

ACCIONA continues to support the creation of added value in the wind industry in Spain and around the world as the largest shareholder in Nordex<sup>11</sup>. In 2019, ACCIONA increased its stake in Nordex to 36.41%.

The company maximises the capacity of company-owned wind turbines through innovative control strategies, implements noise reduction techniques, uses 3D printing to manufacture spare parts, and develops tools to generate automatic alerts for detection and monitoring of storms and lightning (THOR system), among others. Through the TURBINE FOR LIFE project, it develops and applies predictive maintenance methodologies based both on physical models and on big data, machine learning and artificial intelligence.



## Outstanding projects and cases

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### El Cortijo wind farm (Mexico)

Location: Reynosa, Tamaulipas (Mexico). Scale: 183 MW installed capacity, 61 wind turbines. Execution period: 2017-2018. Investment: 235 M USD. Ownership: ACCIONA. Description: this is the first renewable project to be completed under Mexico's energy reform. **Strengths: contribution of 232 M USD to Mexico's GDP over its useful life. Produces enough clean electricity to power 371,000 Mexican households. Over 400 jobs during peak construction. The facility avoids the emission of 375,000 tons of CO<sub>2</sub> into the atmosphere each year.**

### Mortlake South wind farm (Australia)

Location: Mortlake, Victoria (Australia). Scale: 157.5 MW installed capacity. Investment: 180 M€. Execution period: 2019-2020. Ownership: ACCIONA. Description: ACCIONA's fifth wind farm in Australia, with 105 hub height. **Strengths: clean energy for about 115,000 homes and creation of about 100 jobs on average during construction and 10 stable jobs during operation. The facility will avoid the emission of 532,000 tons of CO<sub>2</sub> by coal-fired plants each year.**

<sup>10</sup> Source: IHS 2018, excluding operators in China

<sup>11</sup> More information about Nordex at its website <https://www.nordex-online.com/en/>

### San Gabriel wind farm (Chile)

Location: Araucanía region (Chile). Scale: 183 MW, 61 wind turbines. Execution period: 2017- 2019. Ownership: ACCIONA. Description: the first wind farm in Chile to use concrete towers. **Strengths: capacity to supply 270,000 homes. Creation of 510 jobs during construction and 15 jobs during operation and maintenance. It will avoid the emission of 632,000 tons of CO<sub>2</sub> from coal-fired plants, equivalent to the positive impact of 31 million trees.**



## Solar photovoltaic

<b>1,142 MW</b> ACCIONA-owned	<b>10</b> Large photovoltaic plants	<b>7</b> Countries
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ACCIONA is a key player in the installation of solar photovoltaic plants and a pioneer in building large plants of this type. ACCIONA has the necessary experience, technology and capabilities to develop photovoltaic projects anywhere in the world.

The company provides solutions aimed at optimising production and reducing the cost of photovoltaic energy, covering all phases, from analysis of the energy resource, design of the most suitable plant, construction of the plant to the highest standards, and efficient operation of the plant, reaching availability rates of close to 100% through the use of prediction and real-time control programs.

## ACCIONA owns 1,142 MWp of installed capacity

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In 2001, ACCIONA built the largest photovoltaic solar plant in Spain at the time: a 1.2 MWp plant in Tudela (Navarra, Spain). A decade later, in 2012, that same plant installed the first grid-connected energy storage facility with batteries in Europe. This system smooths fluctuations in photovoltaic output and enhances integration of the plant with the grid.

The Sishen (South Africa) photovoltaic plant, built in 2014, was the largest photovoltaic plant built by the company at the time, with 94.3 MWp; its output is equivalent to the electricity used by 100,000 homes.



### Outstanding projects and cases

#### Puerto Libertad photovoltaic plant (Mexico)

Location: Puerto Libertad, Sonora (Mexico). Scale: 405 MWp, with 1,222,800 photovoltaic panels. Commissioned: 2019. Participation: owned 50% by ACCIONA. Description: one of the largest photovoltaic plants in Mexico and Latin America in terms of capacity. **Strengths: capacity to meet the electrical demand of 583,000 homes; 500 direct jobs during construction, with peaks of up to 900, and 38 jobs during the operation phase. It will avoid the emission of 925,443 tons of CO<sub>2</sub>, equivalent to the positive impact of 46 million trees.**

**Commissioning of the Almeyda photovoltaic plant (Chile)**

Location: Chañaral and Diego de Almagro municipalities, Atacama region (Chile), located in the Atacama desert, one of the places with more solar resource on Earth. Scale: 62 MWp peak capacity (54.2 MW rated), able to produce an estimated 167.5 GWh using 187,620 modules mounted on tracking structures. Commissioned: late 2019. Ownership: ACCIONA. **Strengths: able to meet the electrical needs of 80,000 households, it created up to 350 jobs during peak construction. It produces emission-free electricity, avoiding the emission of 162,000 tons of CO<sub>2</sub> by coal-fired plants.**

**First grid-connected floating photovoltaic plant in Spain**

Location: Sierra Brava reservoir, Extremadura (Spain). Scale: 1,125 kWp installed capacity, 600 photovoltaic modules. Area: 1.2 hectares, occupying only 0.07% of the reservoir's surface. Construction commencing: 2020. Ownership: ACCIONA. Description: construction of Spain's first grid-connected floating photovoltaic plant. **Strengths: Floating photovoltaic plants offer higher performance due to the lower ambient temperature, the availability of a flat surface, the lack of shade and the ease of installation. This technology can also be associated with hydroelectric plants, with which it can share electrical infrastructure, providing greater flexibility. Plants of this type are suitable for regions where there is little land available and are attractive in areas with weak electricity grids. The panels also reduce evaporation and improve water quality by suppressing algal growth.**

**Innovation hub at El Romero Solar plant (Chile)**

ACCIONA has created a hub or innovation centre in the photovoltaic plant which it owns in Atacama (Chile). Its objective is to test new photovoltaic technologies that can increase the efficiency and performance of solar installations. In particular, it is examining the mechanical and energy behaviour of bifacial crystalline, split-cell, and thin-layer cadmium telluride (CdTe) modules. All these technologies are in the development phase and may shape the future evolution of photovoltaic energy.



Hydroelectricity

<b>873 MW</b> ACCIONA-owned	<b>76</b> Hydroelectric plants	<b>22</b> Watersheds	<b>Spain</b> Location
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Hydroelectricity has been a part of ACCIONA's power generation portfolio since the company first entered the energy field. Initially, it focused on modernising and upgrading small hydroelectric plants and also on building new plants. ACCIONA's experience in this technology ranges from surveying resources through design and construction to operation and maintenance of hydroelectric facilities.

ACCIONA owns **873 MW of hydroelectric capacity**, which can meet the electricity needs of **655,000 Spanish homes**



**Outstanding projects and cases**

**Ip hydroelectric plant (Spain)**

Location: Canfranc Estación, Huesca (Spain). Scale: 88.85 MW (generating), 99 MW (pumping). Commissioned: 1969. Ownership: ACCIONA. Description: Reversible hydroelectric power plant, consisting of three units each comprising an alternator, turbine and pump, enabling the plan to store surplus electricity. **Strengths: supplies clean energy for over 16,000 homes. Favours the integration of renewable energy into the national grid.**

**Seira (Spain) hydroelectric plant has been running for over 100 years**

Location: La Ribagorza, Huesca (Spain). Scale: 36.7 MW. Commissioned: 1918. Ownership: ACCIONA. Description: the plant is in perfect working order after over 100 years. **Strengths: the plant made a decisive contribution to the region's development, and employed up to 2,300 workers. It continues to produce enough renewable electricity to power about 20,000 households while avoiding the emission of 76,000 tons of CO<sub>2</sub> per year.**



**Renewable thermal: biomass and solar thermal**

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<b>61 MW</b> ACCIONA-owned	<b>3</b> Biomass plant	<b>Spain</b> Location
<b>65 MW</b> ACCIONA-owned	<b>1</b> Solar thermal plant	<b>USA</b> Location

ACCIONA's renewable thermal solutions include the generation of electricity from solar thermal and biomass plants.

ACCIONA played a fundamental role in promoting and developing solar thermal technologies worldwide. The company was a pioneer in this area when it connected the Nevada Solar One solar thermal plant to the grid in 2007; this 64 MW parabolic trough plant is located in the Nevada desert (USA). As a result, it was the first company in the world to commission a solar thermal plant following the projects in California between 1985 and 1991, and contributed to reviving this renewable technology.

ACCIONA owns the Nevada Solar One plant, the **third-largest solar thermal plant in the world**, and pioneered biomass plant operation with the first plant in Europe equipped to burn two types of feedstock

ACCIONA also has experience in the design, construction and operation of large biomass plants for large-scale electricity generation; it commissioned the first grid-connected biomass plant in Southern Europe, the 30.2 MW Sangüesa (Navarra) plant, in 2002. As well as being renewable, biomass generation contributes to developing the rural environment, lending structure to the local economy, leveraging the value of agricultural resources and reducing the risk of forest fires, among other advantages.



### Outstanding projects and cases

#### Nevada Solar One solar thermal plant (USA)

Location: Boulder City, Nevada (USA). Scale: 64 MW, comprising 760 parabolic solar collectors. Commissioned: 2007. Ownership: ACCIONA. Description: built in a desert setting in a record time of 13 months, it was the largest solar thermal power plant installed in the world since 1991 and is now the third-largest. **Strengths: 800 jobs created during construction and about 30 during operation; average annual production of 136 GWh, equivalent to the demand of approximately 15,000 homes. It avoids the emission of 129,000 tons of CO<sub>2</sub> per year.**

#### Three landmark biomass plants in southern Europe (Spain)

Location: Sangüesa biomass plant (Navarra, Spain), Miajadas biomass plant (Cáceres, Spain) and Briviesca biomass plant (Burgos, Spain). Scale: 61 MW (30 MW, 15 MW and 16 MW, respectively). Commissioning: 2002, 2010 and 2010, respectively. Ownership: ACCIONA. Description: ACCIONA operates in the biomass sector with three plants that burn straw (total capacity: 61 MW). All three are leading references in the development of biomass for electricity generation in southern Europe, and the accumulated experience of almost 20 years enhances the company's know-how, particularly with regard to raw material logistics. **Strengths: average annual output sufficient to power 140,000 households (60,000, 40,000 and 40,000, respectively). Each year they avoid the emission of 438,000 tCO<sub>2</sub>e (192,000, 123,000 and 123,000, respectively).**



### Flexibility and new energy solutions

ACCIONA is a pioneer in the development of flexible solutions, consisting of integrating renewable generation with storage and the combination of several renewable generation technologies. ACCIONA's main objective is to meet electricity demand by increasingly integrating clean energies while optimising the scope for managing output, providing security, stability and predictability to the system.

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ACCIONA is a **pioneer worldwide** in hybridisation of wind power and organic photovoltaic modules

Solutions of this type play a key role in maintaining the necessary pace of decarbonisation, since they make it possible to optimise grid infrastructure, thereby accelerating the installation of new renewable capacity. The company was the first in Spain to integrate batteries for power storage into grid-connected wind and photovoltaic plants, which facilitates grid integration and optimises power output.

In order to analyse the benefits of solutions that afford flexibility, at the Madrid Climate Summit (COP25), ACCIONA and Bloomberg New Energy Finance presented a report on "Flexibility Solutions for High-Renewable Energy Systems". The report showed that new flexibility technologies have the dual advantage of integrating larger volumes of renewable generation and displacing backup fossil capacity, thus reducing the cost of energy imports and contributing to full decarbonisation of the electricity system.



## Outstanding projects and cases

### First hybrid wind and organic photovoltaic project in the world (Spain)

Working with German start-up Heliatek, ACCIONA has developed organic solar panels, where the chemical reaction takes place in carbon instead of silicon; the resulting solar film is produced in flexible rolls that can supply power for a turbine's ancillary systems. These innovations gave rise to the world's first hybrid wind/organic photovoltaic plant.

The first application was on a wind turbine in the Breña wind farm in Albacete (Spain). Eight levels of solar panels were installed along 50 of the tower's 80 metres height, enabling a single installation to combine two sources of clean energy. This is a departure from pre-existing experiments with wind/photovoltaic hybridisation, which involved solar panels installed on the ground.

The initiative is part of a broader project developed by ACCIONA to study various emerging photovoltaic technologies with the goal of pioneering the adoption of the most efficient solutions in each case and strengthening its worldwide lead as a photovoltaic developer.

In addition to investing in mature technologies that are already competitive, ACCIONA innovates in cutting-edge energy solutions that make it possible to advance in decarbonisation. The company was a pioneer in focusing on solutions such as storage and hybridisation, and in green hydrogen production through photovoltaic power generation and electrolysis.

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#### Power to Green Hydrogen, the largest hydrogen plant in Europe (Spain)

Location: Mallorca, Balearic Islands (Spain). Completion date of first phase: 2021. Partners: Cemex, Enagás and Redexis. Description: construction of the largest plant in Europe for producing hydrogen by electrolysis with Proton Exchange Membrane (PEM) technology, powered by photovoltaic technology, for use as fuel in transport and industry. **Strengths: The construction of the hydrogen plant represents a contribution of 20.82 M€ to local GDP and the creation of 237 local jobs per year during the construction phase (two-and-a-half years). Once operational, the plant will reduce emissions by approximately 10,000 tCO<sub>2</sub>e/year.**



## Energy sales

ACCIONA has a long track record in selling electricity wholesale and supplying electricity from renewable sources to a broad portfolio of large clients. The company markets and supplies electricity in Spain and Portugal that is guaranteed 100% renewable, as accredited by Spain's National Commission on Markets and Competition (CNMC), and it is the largest supplier of renewably-only electricity in the Iberian electricity market, having sold more than 6 TWh in 2019.

The company has supplied more than five hundred companies and institutions, such as Acuamed, Adif, Aena, Canal de Isabel II Gestión, Coca-Cola Partners, Inditex, Merck, Metro de Madrid, Repsol, RTVE, Telefónica and Unilever, as well as various hospitals in the Madrid region, the Teatro Real de Madrid and Museo Nacional Centro de Arte Reina Sofía.

Electricity supply services include administrative support and advice on the most appropriate contract form to optimise customers' electricity bills.

The company also operates a portfolio of ACCIONA carbon credits for sale to third parties and offers access to international markets. By creating and selling offsets linked to its own plants, the company offers a value-added product to socially and environmentally responsible customers in voluntary carbon markets.

From its position in such markets, ACCIONA offers access to international carbon markets and operations related to its projects registered under the United Nations Clean Development Mechanism (CDM) or under the Voluntary Carbon Standard (VCS) and also to its facilities that are regulated under the EU-ETS.

ACCIONA is the **largest renewable-only energy supplier in the Iberian Peninsula**, with more than 500 customers and an associated capacity of 9,627 MW

ACCIONA also signs long-term renewable Power Purchase Agreements (PPAs) with large corporations in all the countries where it operates, and has already signed major contracts in Australia and Latin America.

ACCIONA has long-term PPAs in place with Google (Chile), Falabella (Chile), LATAM Airlines (Chile), ENAMI (Chile), Cemex (Mexico) and Viva Energy (Australia). In 2019, the company signed a PPA with ECONSSA to supply electricity to its desalination plant in Atacama (Chile).



### Outstanding projects and cases

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#### Supply of 100% renewable electricity to Aena (Spain)

Location: all Aena airports in the Iberian peninsula (including Adolfo Suarez Madrid-Barajas Airport and Josep Tarradellas Barcelona-El Prat Airport). Scale: an estimated 728 GWh. Client: Aena. Description: supply of renewable electricity at high voltage to all Aena airports in the Iberian Peninsula in 2020. **Strengths: will avoid the emission of 460,000 tons of CO<sub>2</sub> by fossil fuel plants each year.**

#### Long-term renewable PPA with ECONSSA (Chile)

Location: Atacama desalination plant (Caldera, Chile). Scale: all the electricity supplied by ACCIONA will come from the company's renewable plants in Chile, where it currently has 234 MW under construction and permission for 368 MW. Client: ECONSSA. Description: supply of 100% renewable electricity to a desalination plant. **Strengths: power supply, free of CO<sub>2</sub> emissions, to a desalination plant that will palliate the water shortage in the area and produce enough water to meet the needs of four towns.**

## **GREENCHAIN: a platform for tracing the renewable origin of energy supplied**

ACCIONA is gradually implementing the innovative GREENCHAIN technology around the world, enabling clients to trace the renewable origin of the electricity they buy. In this way, ACCIONA customers anywhere in the world can obtain assurance, in real time, that 100% of the electricity they consume is clean. Since 2019, clients in Spain, Portugal, Chile and Mexico have been able to verify the specific renewable plant that is supplying them, as well as viewing past consumption statistics and other relevant data, such as the avoided CO<sub>2</sub> emissions and the social initiatives that ACCIONA is carrying out in the project that supplies their electricity.

## **Pioneers in using blockchain in emission rights trading**

ACCIONA is a promoter of Climate Trade, the world's first blockchain-based carbon rights trading platform, created by Spanish start-up Climate Blockchain Initiatives (CBI). This platform facilitates trading of emission rights between generators and buyers that need to reduce their carbon footprints.

ACCIONA will provide the platform with Certified Emission Reductions (CERs) associated with its renewable power generation in various developing countries, such as Mexico, Chile and Costa Rica, which are tradeable under the United Nations Clean Development Mechanism (CDM).

Together with the CERs, ACCIONA will offer information on corporate social responsibility initiatives associated with the renewable projects involved and linked to the Sustainable Development Goals (SDGs).

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### Energy services

ACCIONA provides end-to-end management of energy use, covering both demand and supply, with a management model based on two distinctive features: sustainability and digitalisation. The company provides energy services to large public- and private-sector clients in seven countries, creating comprehensive solutions for energy optimisation and generation (auto-production).

Using its innovation and technology development capabilities, the company combines proven technologies based on calculation models that enable it to adjust demand in real time and achieve the targeted energy and monetary savings and the reduction in atmospheric CO<sub>2</sub> emissions. ACCIONA assumes all liabilities and costs in these projects, guaranteeing the energy and monetary saving for clients in a secure, flexible way.

ACCIONA's energy efficiency services are based on custom demand management surveys. These surveys serve to define a development model that will contribute to reducing energy consumption and optimising operating conditions and processes in the facilities and buildings. The company offers a comprehensive energy management system, examines possible solutions and re-engineers energy use and consumption.

**Savings of up to 55% in clients' energy consumption, avoiding the emission of 31,000 tCO<sub>2</sub>. Energy savings of up to 30% in industry, equivalent to over 18,000 tCO<sub>2</sub>**

ACCIONA remotely monitors clients' energy consumption in real time to analyse deviations and implement corrective measures. It also performs baseline energy surveys at each client and draws up custom plans, including tracking and reporting. This enables ACCIONA to offer a personalised solution for each client.

ACCIONA delivers technical services that include energy audits prior to drafting an Energy Savings Programme or Energy Services Plan; technological applications; and renewable energies as drivers of energy services, among others.

ACCIONA is accredited to the leading international standards for the purpose of delivering high-quality energy services. The company is registered as an energy services company with Spain's Institute for the Diversification and Saving of Energy (IDAE), it is an Energy Services Provider authorised to engage in the energy efficiency business in accordance with Royal Decree 56/2016, it is a supplier of energy services accredited by AENOR in accordance with the EA0055 specification, and it has an Energy Management System that is certified in accordance with ISO 50001 for the delivery of energy services.

The company provides regular training for the professionals who deliver energy services to its clients. Accreditations include Certified Measurement and Verification Professional (CMVP) and Certified Energy Manager (CEM).



### Outstanding projects and cases

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## Energy efficiency services for industry

Energy is one of industry's largest operating costs and, consequently, this is an area with very high scope for energy savings. ACCIONA provides energy services in automobile production, agri-food and other industrial plants in order to reduce consumption and improve the facilities' operating and process conditions.

In the automobile industry, ACCIONA has projects in 15 facilities of Europe's main manufacturers (Germany, Spain, France, Poland, Portugal and the United Kingdom). In these facilities, ACCIONA uses the energy services company approach, taking all responsibility and bearing the cost of audits, engineering, capital expenditure and implementation of measures while guaranteeing savings, freeing the client of costs and risks, and ensuring that results will be achieved quickly and safely.

## **ACCIONA improves energy consumption in 400 buildings for the City of Madrid (Spain)**

The four-year contract, worth approximately 17 M€, seeks to cut energy consumption by 50% in the buildings owned by the City of Madrid.

The company is setting up a Municipal Energy Management System to allow for real-time tracking and management of the buildings' energy consumption in order to detect and correct inefficiencies.

Through energy audits, ACCIONA will identify and implement energy saving projects, and energy consumption will be monitored in real time by the company's control centre, using big data and machine learning techniques.



### **Operation and maintenance of renewable assets**

In order to maximize output, ACCIONA's approach is to maintain facilities in as-new condition. The company provides operation and maintenance services for company-owned and third-party renewable assets in the main technologies, particularly wind and solar photovoltaic.

ACCIONA applies the highest standards of asset operation, management and maintenance, enabling it to extend the useful life of facilities and optimise processes, minimising energy consumption. To this end, it uses predictive maintenance programs based on physical models and on smart management of big data, artificial intelligence and machine learning in order to extend the useful life of equipment.

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### **Outstanding projects and cases**

## **Renewable Energy Control Centre (CECOER)**

ACCIONA's CECOER is the world's largest renewable energy control centre, managing a total of over 15,000 MW owned by ACCIONA and third parties. The CECOER supervises the operation and manages data from more than 400 wind, hydroelectric, photovoltaic and solar thermal installations in 22 countries.

Located in Sarriguren (Navarra, Spain) and handling 60% of incidents remotely, CECOER ensures high availability rates for the facilities operated by the company and low rates of deviation between actual output and that scheduled with the grid operator.

## El Perdón: 25 years of superb performance by Spain's first wind farm

ACCIONA commissioned the El Perdón wind farm in 1994. It was the company's first wind farm, and also the first commercial wind farm in Spain. This facility is a reflection of ACCIONA's great capacity not only in facility operation and maintenance but also in continuous improvement and evolution.

The wind farm's efficiency and capacity have increased steadily since its commissioning 25 years ago. Specifically, the wind turbines' capacity has been increased six-fold, and output eight-fold, while the towers are now three times higher and the rotor diameter has tripled.



### EPC for third parties

ACCIONA builds power plants not only for its own use but also for third parties under EPC (Engineering, Procurement and Construction), i.e. turnkey, contracts.

The company puts its capacity to develop projects in the main renewable technologies, in which it has extensive experience in both its own and third-party facilities, at the disposal of the market.

Waterworks played a major role in the history of ACCIONA. Since the middle of the 20th century, dams were particularly important in order to meet Spain's water needs, and there was a steady flow of advanced and landmark projects. The company also applied its experience in other countries. ACCIONA uses the most innovative technology to build dams in a context of respect for the environment.

ACCIONA also builds solar thermal, biomass and biofuel plants. It is a leading developer of turnkey solar thermal plants, having installed over 600 MW.

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### Outstanding projects and cases

#### Site C hydroelectric plant (Canada)

Location: British Columbia (Canada). Commissioning: 2024. Scale: 1,100 MW. Client: BC Hydro. Description: one of Canada's largest infrastructure projects and one of the country's largest dams. The project consists of building an earth dam, two diversion tunnels, the concrete foundation for the power plant, and the spillways. **Strengths: energy to supply 450,000 homes. It will produce a large amount of clean renewable energy, driving economic development and job creation.**

#### Cubillos del Sil biomass plant (Spain)

Location: Cubillos del Sil, León (Spain). Scale: 49.9 MW rated capacity, burning 280,000 tons of biomass per year. Commissioning: 2020. Client: Forestalia. Description: ACCIONA is the EPC contractor for a biomass-fired power generation plant which it will also operate and maintain for 15 years. The plant was built in a record 17 months, well ahead of schedule. **Strengths: 200 jobs created in the construction phase and 50 during the operating phase (15 years). It can produce enough electricity to supply 50,000 homes. It will also create close to 300 jobs in forestry, farming and transport. This highly efficient power generation plant produces a low amount of CO<sub>2</sub> emissions.**

#### **Mohammed Bin Rashid Al Maktoum solar farm (United Arab Emirates)**

Location: Dubai (United Arab Emirates). Scale: peak capacity of 1,054 MW, using over 3 million photovoltaic panels. Approximately surface area: 17.8 km<sup>2</sup>. Commissioning: 2020. Clients: this turnkey project will be delivered to a consortium comprising Dubai Electricity and Water Authority (DEWA), Masdar and EDF. Description: construction of the world's largest photovoltaic plant using a single axis tracking system. **Strengths: the installation will avoid the emission of 1.4 million tons of CO<sub>2</sub> per year.**

### **Cerro Dominador, the first solar thermal plant in Latin America (Chile)**

As part of a consortium, ACCIONA is executing a turnkey project to build the first solar thermal plant in Latin America, in the town of María Elena in the Atacama desert (Chile).

The plant, called Cerro Dominador, will have a capacity of 110 MW and will be able to avoid the emission of 640,000 tons of CO<sub>2</sub> per year, with 17.5 hours of thermal storage using molten salts. The project is expected to create over 1,000 jobs.



## Distributed power generation

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ACCIONA is aware that distributed generation of renewable energy will play a key role in the future of energy as a competitive, sustainable and safe system, principally because of its ability to adapt to energy users' diverse needs. In response to this need, the company has developed solutions for power generation close to the point of consumption within its product portfolio.

This includes both grid-connected and standalone solutions. In this way, ACCIONA responds to the specific needs of customers and communities with a value proposition based on reducing fossil fuel consumption through solutions that are both competitive and reliable.

In pursuit of technological innovation in distributed generation, ACCIONA is participating in a project that has developed a tool for the analysis, design and optimal dimensioning of micro-networks. The project includes a flexible modular micro-network management system whose goal is to maximise renewable generation and the return on investment, as well as guaranteeing security of supply.

ACCIONA has defined a number of challenges to be addressed in managing new distributed generation models. Micro networks and virtual power plants, the electric vehicle as another component of the system, a second life for batteries, and network management and stability services are some of the areas of opportunity that the company is exploring.



## Outstanding projects and cases

### Luz en Casa programme in Ngäbe-Buglé (Panama)

Through its foundation, ACCIONA extended its Luz en Casa programme to Panama; this social initiative consists of offering a sustainable solution for access to electricity in isolated rural communities, preferably located in indigenous regions, which are outside the scope of conventional electrification plans.

The Ngäbe-Buglé Luz en Casa programme provides a basic electricity supply using standalone renewable sources. Specifically, it uses third-generation solar home systems, which are user-installable, very efficient, free of pollutants and meet users' energy needs safely. ACCIONA was assisted by the Spanish Agency for International Development Cooperation (AECID).

The Ngäbe-Buglé indigenous region is the least developed area in Panama and the one with the least access to services. In total, 2,270 users in 400 homes in the region have benefited from access to renewable electricity, obtaining 876,000 hours of lighting per year.

ACCIONA leads the fight against climate change and is accelerating the transition towards a decarbonised energy model, by **guaranteeing access to clean renewable energy**





## TRANSPORT SOLUTIONS

Having built over 10,000 km of communication infrastructure, ACCIONA is a **leading player in the construction and operation of transport infrastructure** for people and goods — roads, bridges, railways, tunnels — as well as water and data

ACCIONA has more than 150 years of experience in building railway infrastructure, having made its mark on hundreds of projects. It has designed and executed more than 3,000 kilometres of railways, of which more than 1,700 km are high-speed lines.

The company has also participated in the construction of underground and light railway lines throughout the world and has an extensive track record in underground works. It stands out in this field because of its research into geotechnics, the use of mechanical excavation and proper ventilation systems, as well as the use of tunnel boring machines as a safer means of digging tunnels because they shorten execution times. The group is also a leader in construction and engineering solutions for bridges and viaducts: pedestrian overpasses, arch viaducts, cable-stayed and hanging bridges, made of concrete, metal or both.

In the maritime works area, ACCIONA has extensive experience and uses the most advanced machinery. An example is the Kugira floating dock, one of the largest in the world in its category, capable of producing a caisson that is 70 m long, 36 m wide and 35 m high in just ten days.

The key to the company's success in transport infrastructure and services is that it covers the entire value chain, from identifying the opportunity, planning and financing through design and construction, to operation and maintenance of the finished project. This optimises synergies between the phases and enables comprehensive solutions to be provided in highly complex projects.

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ACCIONA also develops high efficiency telecommunications transmission lines and data centres with a low environmental impact.

The company also applies accredited life cycle analysis to projects. This can include the certification of a product's environmental footprint through an Environmental Product Declaration (EPD).

The company's spending on R&D and innovation put it to the forefront in most transport infrastructure projects. In order to improve construction processes, ACCIONA created a Construction Technology Centre, which analyses project execution and provides input on aspects relating to the environment, digital transformation, sustainable processes and the circular economy.

ACCIONA monitors projects and undertakes preventive maintenance on the basis of digitalisation using the Internet of Things (IoT) and real-time data capture devices. This reduces project costs and times, and improves worker safety.

ACCIONA has over **150 years' experience** in transport solutions.

### Global challenges met by transport solutions

- › Population pressure and urban concentration.
- › Climate emergency.
- › Change of the economic model towards a circular economy.
- › Social inequality.

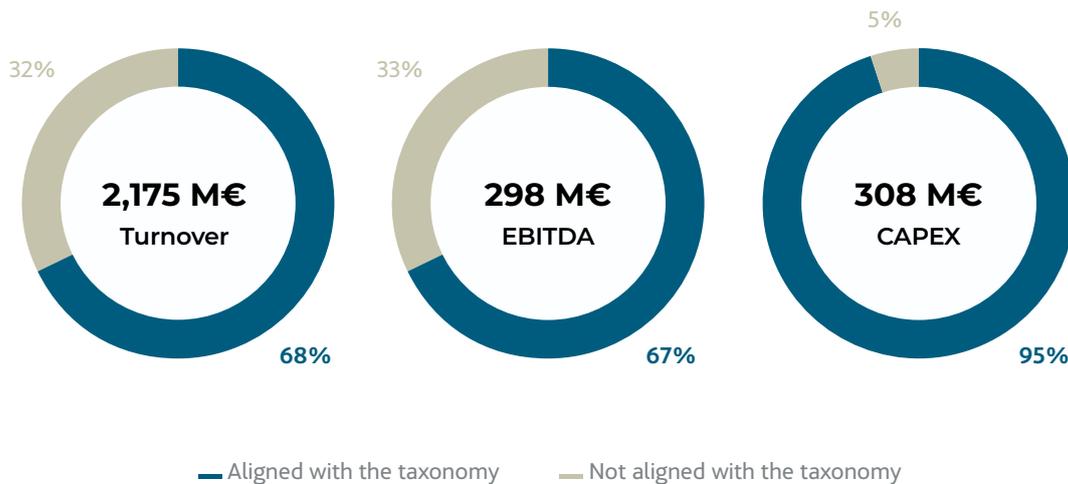
### Need for investment in transport solutions between 2019 and 2030 to achieve the SDGs



**15,500**  
billion USD

Source: AFI

### Key figures



The European taxonomy is a classification tool developed by the European Commission in order to identify activities that contribute significantly to the decarbonisation of the economy. The information refers to fiscal 2019 and was independently reviewed by the company's auditor, whose report is available at <https://www.acciona.com/sustainability/sustainable-finance/>



### Main taxonomy-related factors

- › All the infrastructure required for zero-emission transport is eligible.
- › Electricity transmission and distribution infrastructure must be connected to systems that currently do not exceed an emission intensity of 100 gCO<sub>2</sub>e/kWh over their life cycle.

## Innovation in materials

Part of ACCIONA's R&D and innovation work focuses on materials used in projects.

It is working on ideas for reinforcing foundations with self-drill micropiles, stabilising soil with cement mixed with ash, and the use of composite materials.

Composites are materials made of resin and fibre with characteristics that are far superior to those of the component parts. They are up to ten times lighter than conventional materials, which reduces the consumption of raw materials and energy in the manufacturing and installation process, and in the infrastructure's life cycle.

ACCIONA used composites to build a lighthouse in the port of Valencia (Spain), the first composite bridge in Spain and the longest pedestrian overpass in the world, among other projects.



### 2019 Milestones

- › Entry into service of Sydney Light Rail, in Australia.
- › Inauguration of the Toowoomba bypass, in Australia.
- › Contract for the Moss railway line, in Norway, worth 420 M€.
- › Contract for undergrounding Murcia station as part of the new high-speed railway access to Spain's east coast, worth 160 M€.
- › Contract for the design, financing and construction of the Pattullo Bridge, in British Columbia (Canada), for 950 M€.
- › Test phase completion of the sliding beam installation system designed and manufactured for the Cebu bridge in the Philippines. This project was named Project of the Year by the Spanish Chamber of Commerce in the Philippines.

## Project portfolio in 2019 and 2020

Project	Solution	Country	Completion	Amount (M€)
E-6 highway	Highways	Norway	2024	410
Moss railway line	Railways	Norway	2025	420
Pattullo bridge	Bridges	Canada	2023	950
Follo line tunnels	Tunnels	Norway	2021	650
Logroño south bypass	Highway	Spain	2023	111

Project	Solution	Country	Completion	Amount (M€)
El Risco – Agaete road section	Roads	Spain	2024	152
Road maintenance Canada	Road (4,200 km)	Canada	Miscellaneous	235
Railway works Australia	Level crossing removal and station construction	Australia	2023	335
Cebu bridge	Bridges	The Philippines	2021	366
Pan-American highway	Roads	Panama	2022	310



## Toll Roads

ACCIONA has been developing complex toll road and highway projects throughout the world for years, working on all phases of a project: bidding, design, construction, operation and maintenance. Toll road concessions range from conventional tolls to free-flow systems and shadow tolls, with different forms of payment depending on availability and demand.

The company's technical strengths in roads are based on the design and development of smart infrastructures. The roads built by the company are pioneers in the application of circular economy ideas, in the use of techniques for process automation and optimisation, such as BIM (Building Information Modelling), and in their resilience and safety in adverse conditions.

ACCIONA has **built more than 5,000 km of roads** and operates 1,300 km of concessions

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ACCIONA's projects draw inspiration from the circular economy, enabling it to reuse natural materials or materials from post-construction excavation processes such as embankments, concrete and pavement. It also uses 3D printing to make construction materials and components on site.

Another example of the circular economy is smart asphalt, which can repair itself or warn if it is deteriorating. This and the preceding initiatives help to reduce construction and maintenance time and costs.

ACCIONA uses innovative techniques in its projects in order to optimise processes. The use of remote-operated machinery and 3D and 4D terrain modelling based on drones make it possible to optimise construction work.

Smart roads collect and relay road and vehicle data, allowing for better maintenance of the pavement and efficient traffic management so as to minimise the environmental impact and increase driver safety. An innovation in ACCIONA's concessions area is barrier-free wireless tolling technology, which reduces CO<sub>2</sub> emissions by not requiring cars to stop.

ACCIONA uses BIM and data architecture to digitise infrastructure design, construction and operation. BIM helps to avoid inconsistencies and errors, saves time and reduces costs, since it makes it possible to simulate construction from the early stages of the project, while information is constantly updated. BIM also organises and controls technical team planning. This makes it possible to share a database of key project information with the client in order to optimise infrastructure management and maintenance.

## **Roads based on the circular economy concept: use of secondary raw materials**

The Construction Technology Centre is working on new solutions for road building using secondary raw materials from other industries.

As part of the PAPERCHAIN project performed in 2019 and co-financed by the European Commission, a 600-metre test section was built on the A-33 Cieza-La Font de la Figuera motorway in Spain. The entire soil cement layer was replaced with ash from incinerating paper industry waste to produce electricity.

Subsequent monitoring of this section of road showed that, the solution for establishing soil in road construction by replacing cement with paper industry waste, is viable in technical, financial and environmental terms.

## **Digital tool for real-time management of earth movements**

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In 2019, the Construction Technology Centre implemented a new digital platform to respond to a vital need on projects where earthmoving represents a significant part of the total cost, such as the case of road construction.

This tool is being used in the construction of a section of the Puhoi-Warkworth highway, ACCIONA's first project in New Zealand, which consists of an 18.5 kilometre-long four-lane extension of the Northern Motorway, including 2.5 kilometres of bridges and viaducts. The digital platform monitors and manages earthworks in the project in real time, serving effectively to measure and optimise the productivity of resources, particularly machinery and personnel.

The main innovation in this solution compared to others available in the market is fundamentally the ease of deployment at a much lower cost, its ability to integrate with any type of machinery, and flexible ad-hoc configuration for each project.



## Outstanding projects and cases

### E-6 highway (Norway)

Location: Trondheim (Norway). Scale: design and construction of 23 km of four-lane highway, including 8 km underground (four tunnels between 1 and 4 km in length). Execution period: 2019–2024. Investment: 410 M€. ACCIONA will also be responsible for managing traffic and building alternative temporary routes to maintain the flow of traffic between the towns of Ranheim and Vaernes. **Strengths: the project takes advantage of the existing structure by expanding the existing line, which minimises the disruption to local residents and reduces the use of raw materials.**

### Toowoomba Bypass (Australia)

Location: Toowoomba, Queensland (Australia). Scale: a 41 km bypass including an 800-metre viaduct over a railway line and cutting-edge geotechnical treatments because of the complexity of the terrain. The project includes 5 junctions and 24 structures. Execution period: 2015–2019, and maintenance for 25 years. Investment: 1,076 M AUD. Description: design, construction, finance, operation and maintenance of the highway for 25 years. **Strengths: it will reduce travel time for heavy goods vehicles travelling between eastern and western Australia. It will also reduce heavy goods traffic through the city centre. The project created 1,800 jobs, and is part of the Southwest Queensland economic development plan.**

### Highway on the Roskilde fjord (Denmark).

Location: Frederikssund – Roskilde fjord (Denmark). Scale: design and construction of an 8.6 km highway and a 1.36 km concrete bridge over the fjord. The infrastructure also includes ten small infrastructures, such as overpasses and underpasses. Execution period: 2017 – 2019. Investment: 133 M€. **Strengths: ACCIONA incorporated wildlife crossings into the project, exceeding the environmental requirements.**



## Bridges and tunnels

As a result of its lengthy track record, ACCIONA is a world leader in the design and construction of structures that facilitate communication in areas with complex terrain. These projects include bridges and viaducts of great technical difficulty, such as arch-bridges and cable-stayed bridges, in which innovation and new construction procedures are essential factors. Examples include the Waltherdale Arch Bridge in Edmonton (Canada) and the Cebu cable-stayed bridge (Philippines).

Since 2004, ACCIONA has held a patent for an automated deck installation system for bridge construction. This technique is applicable to concrete, metallic or combined material deck slabs. The slabs are created on site, in a purpose-built facility. They are then moved into place with an automated system that uses anchored hydraulic jacks and a sliding section. This process hinges on an electronic control method.

These non-conventional systems were used on the A30 Express project in Montreal (Canada). A bridge measuring over 2,500 metres in length was built over the Saint Lawrence river, with the main span measuring 150 metres. This bridge, whose vertical geometry varies considerably, is one of the first structures to be built in Canada using the sliding deck system.

ACCIONA stands out for its geotechnical research and innovation in underground construction.

ACCIONA has **85 years of experience in bridge-building, having built 600 bridges, of all types**

ACCIONA also designed an innovative laser guidance system for digging tunnels without heavy machinery, which increases dig accuracy by more than 60%. This new system saves almost 30 MWh of energy and increases workplace safety.

ACCIONA is a world leader in machinery for underground infrastructure and tunnels. Some of its tunnel boring machines have unique bores, up to 15 metres in diameter. The company's tunnel boring machines have set several world records.

The TBM Control Centre (CCT) is a pioneering platform produced by ACCIONA for remote data storage and monitoring. This system makes it possible to acquire large amounts of data, develop a predictive maintenance model, and simulate progress of the work carried out by the TBM. It processes more than four million data items per TBM per day in real time, from force and speed of rotation, to the rate of advance, and consumption of fuel, lubricant and energy. The TBMs have up to 65,000 sensors on board that report performance every 250 milliseconds. A single machine produces about 45 terabytes of data per year.

To shorten construction time and save costs, ground-penetrating radar is used in underground works, such as Quito Metro.

ACCIONA has **built more than 600 kilometres of tunnels on the five continents**

ACCIONA also incorporates circular economy innovations into the construction of tunnels and other underground infrastructures. It recycled over 86,000 tons of granite in the construction of the Padornelo tunnel in Zamora (Spain).



### Outstanding projects and cases

#### Cebu port (Philippines)

Location: Cebu (Philippines). Description: design and construction of a bridge with a 640-metre cable-stayed section, with 150-metre-high piers supporting a main span 390 metres in length over the port's navigation channel. Execution period: 2018-2021. Investment: project worth 400 M€. **Strengths: most of the structure, with a total length of 5,100 metres, is built of 40-metre spans formed by precast beams installed using a motorised wagon system because of the prevailing weather conditions. Since cyclones are frequent in the Philippines, the system for installing the beams must be attached symmetrically to the piers and anchored to them as quickly as possible. This is the first time this technique had been used in the Philippines. It greatly shortens construction time while increasing safety.**

#### Pattullo bridge (British Columbia, Canada)

Location: Greater Vancouver, British Columbia (Canada). Description: design, construction and financing of a new cable-stayed bridge with a main span 332 metres long, two road connections, and removal of the existing bridge. Execution period: 2019-2023. Investment: estimated at 950 M€. **Strengths: This**

will be one of Canada's largest cable-stayed bridges and will provide a connection that is appropriate to the volume of traffic between the communities of Surrey New Westminster, through a four-lane high-capacity road, with scope to expand to six lanes, plus pedestrian and cycle paths.

## Non-destructive inspection of tunnel lining

ACCIONA's Construction Technology Centre implemented an innovative technology based on ground-penetrating radar for the non-destructive inspection of the quality of filling behind the lining of tunnels dug with tunnel boring machines.

The conventional approach to quality control of this mortar filling process involves drilling to obtain test pieces. Apart from being inefficient and laborious, this destructive testing method only provides a series of samples along the tunnel section.

The use of ground-penetrating radar not only shortens the time and reduces the cost of the inspection but also greatly expands the scope of the inspection, making it possible to scan 15,000 metres on a continuous basis.

### Föllo Line railway tunnels (Norway)

Location: between the cities of Oslo and Ski, to the south (Norway). Description: Design and construction of twin tunnels 19.5 km long for high-speed rail. Scale: 40 km of single-bore tunnel dug with a tunnel boring machine, 2 km of ancillary and safety galleries dug by conventional means, and 140,000 lining segments. Execution period: 2019-2021. Investment: contract worth 650 M€. **Strengths: For several years, this project was the largest transport infrastructure contract in Scandinavia and the first to be executed with 4 tunnel boring machines launched from a large central cavern with a single access point from the outside.**

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## Weatherproof tunnel lining

In the lining segments used in the Follo Line railway tunnels in Norway, ACCIONA applied innovative weatherproofing techniques.

The segments are cured at 50°-60°C and subsequently stored at temperatures as low as -10°C. This procedure helps to detect any risk of cracking due to thermal shock and makes it possible to match segments of two different types based on different weather conditions.

The first type is made from high-durability fibre-reinforced concrete in order to withstand normal weather conditions. To withstand extreme weather conditions, other segments were made with latest-generation additives that enable the curing temperature to be lowered from 60°C to 30°C.



## Railways

ACCIONA has been building railway infrastructure for more than 100 years. The company was a pioneer in the construction of Spain's high-speed railway system, as it was the main contractor in building Spain's first high-speed railway line, between Madrid and Seville.

The services offered by the company include railway line feasibility studies, design, construction, operation and maintenance. ACCIONA has proprietary technology for high-speed railway track.

ACCIONA has designed **more than 3,000 km of track**, including more than 1,200 km of high speed track

ACCIONA has developed its own tie plate system, made with precast concrete slabs in conjunction with two pairs of precast blocks with elastic fastening. This method provides the track with adjustable elasticity in three planes in order to attenuate vibrations and adjust vertical rigidity. This facilitates vertical movement by the plate and offers superior adaptation to the terrain with the possibility of level correction.

ACCIONA's work in railways is also guided by the principles of the circular economy. In the project to refurbish the Canfranc station in Huesca (Spain), the company saved almost 200,000 € by reusing the rubble from the esplanade as subgrade and sub-ballast.



## Outstanding projects and cases

### Moss railway line (Norway)

Location: Moss, 50 km south of Oslo (Norway) Description: design and construction of the Sandbukta-Moss-Sastad rail link, 10 km of dual track, of which 5 km are underground. The project includes two tunnels, a cut-and-cover tunnel, and a new station in central Moss. Execution period: 2019-2025. Investment: 420 M€. **Strengths: ACCIONA was the first foreign company to obtain a second contract with Banenor, the Norwegian railway administration, since the beginning of the Intercity project. It is the most technically complex of Banenor's current projects due to the geological and geotechnical characteristics of the terrain. The cut-and-cover tunnel in the centre of Moss, a city of 50,000 people, will be excavated in quick clay.**

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## Underground and light railways

ACCIONA has extensive experience in providing collective mobility solutions such as subways and trams, which are sustainable and safe transportation alternatives. As a promoter, the company is responsible for the construction of 6 urban railways, that serve 80 million travelers a year.

ACCIONA has **experience in the construction of subways** in Spain, Colombia, the United Arab Emirates, Ecuador and Brazil

ACCIONA is a leading designer and developer of underground railway networks around Spain. It also has extensive international experience, such as the first Metro lines in Caracas and Medellín forty years ago.

To build these infrastructures, ACCIONA uses its own tunnel boring machines, which can accommodate 140 professionals inside, with 20 people per shift. In 2018, a tunnel boring machine on the Quito Metro project set a world record: it advanced 79.5 metres in one day. It also set a world record by digging 1,489 metres in 30 days.

The Self Performing Office (SPO) model, implemented in infrastructures such as Quito Metro, also allows for detailed planning of the available human and material resources.

As an innovative technique, ACCIONA uses drones to create digital models of tunnels during the construction phase, enabling it to produce smart prototypes to optimise construction work.



### Outstanding projects and cases

#### Sydney Light Rail (Australia)

Description: Design, construction, finance, operation and maintenance. Scale: a 12 km route with 19 stops, a bridge, a tunnel, and operation of 25 km of infrastructure. Execution period: 2014 – 2019, and subsequent maintenance until 2030. Investment: 1,400 M€. **Strengths: The project presents innovations in braking systems, which recover and reuse the energy that is expended. It also favours the relocation of service infrastructure and extensive urban regeneration. And the project will help decongest the city's traffic, generate an estimated 4,000 M€ in economic activity, and create 10,000 jobs. The project was named "Asia-Pacific PPP Deal of the Year 2015".**

#### Dubai Metro (United Arab Emirates)

Description: Design and construction of the extension of Dubai Metro red line as far as the future Expo 2020 site. Scale: a 15 km line (11.8 km overhead, 3.2 km underground), seven stations and a terminal. Execution period: 2016-2020. Investment: project worth 2,600 M€. **Strengths: The "Wugeisha EXPO 2020" tunnel boring machine was used, which advances an average of 15 metres per day, reducing construction times. Instead of conventional concrete tunnel lining segments, a steel fibre solution was adopted. The trainsets will be fitted with an electric braking system, LED lighting and other low-energy innovations.**

#### Quito Metro (Ecuador)

Description: Design and construction of the first line of Quito Metro. Scale: a line 22.8 km long, of which 0.26 are open sky, 2.37 are stations and the rest are tunnels excavated with three 9.4 m diameter EPB tunnel boring machines. The contract also includes fifteen stations, 30 shafts, a depot and a workshop. Execution period: 2016-2020. Investment: project worth 2,600 M€. **Strengths: one of the three tunnel boring machines used in the project was owned by ACCIONA. The Self Performance Office business unit repaired a tunnel boring machine from Madrid in its workshops and sent it to Quito.**



### Ports and water channels

ACCIONA has carried out numerous maritime works for public and private clients in Spain. It has built ports, dry docks and shipyards, piers and shipping channels for a range of government clients, as well as a large number of marinas for private investors; these infrastructures drive international goods and passenger traffic.

## | ACCIONA has designed and built over 50 ports

A technological innovation is the development by ACCIONA of cylindrical caissons made of composite materials, which are synthetic, minimising the environmental impact. These caissons reduce CO<sub>2</sub> emissions, noise pollution, waste production, and discharges into the sea. Overall, the company reduces emissions to one quarter of the level that would be produced with conventional construction.

Composite materials consist of fibreglass and epoxy resin, which makes it possible to manufacture caissons in a shorter period of time, with less machinery and a smaller environmental impact. Another benefit of composites is their light weight and the fact that they are corrosion-proof and waterproof, enabling them to resist the corrosive conditions of the marine environment. The production process is also more environmentally friendly. It avoids up to 75% of the CO<sub>2</sub> emissions of conventional floating caisson construction.

ACCIONA has successfully used composites in other port works, such as lighthouse construction.

ACCIONA has an extensive track record in water works, with experience in shipping canals, irrigation canals, and water and sewer mains.



### Outstanding projects and cases

#### Açu Port

Location: Campos dos Goytacazes (Brazil). Description: Design and construction of terminal TX2 at the port of Açu. Scale: dikes measuring 5.3 km in length, 2.8 km of which are vertical dikes build with concrete caissons and the remainder are conventional sloped dikes. Execution period: 2011-2018. Investment: project worth 460 M€. **Strengths: ACCIONA delivered the project using the Kugira floating dock, which was transported with a semi-submersible. This was the first vertical caisson project in South America. This solution allowed operational improvements by converting a conventional dock into a combined breakwater/dock, reducing the use of materials, occupation of the seabed and CO<sub>2</sub> emissions. Climate change was also taken into consideration when designing the project so as to make port operations more sustainable.**

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## Kugira floating dock

The Kugira floating dock, developed by ACCIONA, is almost 60 metres high, more than 70 metres long and 49 metres wide.

It is a metal platform capable of building the biggest reinforced concrete caissons in the world. This innovative way of manufacturing structures for expanding ports, such as Barcelona (Spain), enables more than 200 metres of breakwater to be built per month.

Up to 200 workers may be employed on these platforms, which do not interfere with a port's day-to-day operations. The processes following production of the concrete caissons or other structures have a lesser impact on the environment.



## Airports

ACCIONA participates in the entire life cycle of an airport project, based on essential principles of infrastructure efficiency, from design to operation.

ACCIONA has **participated in more than 40 airport projects** since the 1950s

Outstanding projects include Terminal 4 at Madrid Airport, which welcomes more than 35 million passengers per year, as well as Malaga and Alicante airports. The company also works at international airports such as Tetuan (Morocco) and the new terminal at Fiumicino in Rome (Italy).



### Outstanding projects and cases

#### New Mexico City airport (cancelled in 2018)

Description: Bid amounting to 3,930 M€ to build the new terminal. Scale: the airport was due to span 743,000 m<sup>2</sup> on four levels, to handle an estimated 68 million passengers per year. **Strengths: the aerodynamic structure of the terminal, within a continuous light membrane, was adapted to the terrain and minimised the environmental impact. The materials and design took advantage of natural light and facilitated ventilation, reducing energy consumption. The building was designed to supply its own power and water.**



## Airport Services

ACCIONA is one of the main independent airport service operators in Germany, Spain and Chile. Operating in this segment since 1994, ACCIONA provides services that are tailored to airlines' needs.

Services to airlines include: passenger, operations, ramp and cargo handling, passenger service, ticketing and other airport-related activities outside the facilities.

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ACCIONA's participation in this area also enables it to identify opportunities for airport management concessions.

Operating at **22 airports serving over 100 airlines**, handling more than 100,000 operations per year

ACCIONA is in the process of growing the airport services business in Latin America, where in 2019 it expanded to three airports in Argentina: Buenos Aires, Salta and Neuquén, as well as an additional airport in Chile: Puerto Natales.



## Outstanding projects and cases

### Airport services at Frankfurt airport (Germany)

Description: ACCIONA provides passenger handling, ramp handling and operations, as well as specialised services for VIP passengers. Execution period: 2000-present. **Strengths: creation of 1,000 jobs in delivering airport services.**



## Operation and maintenance of transport infrastructure

ACCIONA is a leader in operation and maintenance services for roads and railways. The company has more than 25 years of experience in this segment, providing benefits to users and guaranteeing safety, convenience and smooth traffic flows. Services include cleaning stations and buses, customer care, and maintenance of infrastructures, such as roads.

ACCIONA has **more than 3,000 workers dedicated to maintenance** of transport infrastructure

In railways, ACCIONA also offers cleaning and maintenance services for facilities such as stations, workshops, trains and logistics centres. Contracts in this area include cleaning over 1,800 train stations in Spain for RENFE since 2016.



## Railway services

ACCIONA has more than ten years of experience in integrated logistics tailored to the rail sector, with the option of combining them with others such as road and sea transport. This flexibility reduces costs and lead times for clients.

It also enables the company to offer the possibility of leasing rolling stock or any other equipment needed to cover the client's logistics needs. ACCIONA has series 333 locomotives to pull the trainsets.

This area employs train drivers and planning and operations staff. ACCIONA has a Railway Training Centre where it provides courses and programmes on the specific regulations and procedures in this area.



## Freight forwarding

With more than 30 years' experience in the sector, ACCIONA is specialised in the end-to-end management of goods transport at an international level. The company offers consulting solutions in foreign trade, as well as end-to-end road transport, logistics, customs clearance, distribution and warehousing services.

The company has a team of 130 professionals who manage shipments anywhere in the world. Their functions include planning, organising and coordinating shipments of all types of freight.

ACCIONA also focuses on maritime transport based on preferential agreements with the main shipping companies, and air transport, in partnership with the world's leading airlines. It also provides international freight services by road and urgent courier services.

ACCIONA conducts **40,000 air movements and 14,000 maritime movements** per year to 500 different destinations in 140 countries

Notable projects in the freight forwarding area include shipping structural steel from Spain to New York in 2009-2012 for use in the Ground Zero project. Another was the transfer of components for the Ventikas wind farm in Mexico from factories in Spain and Shanghai since 2014.



### Data centres

In order to cover its clients' IT and operations system needs, ACCIONA offers the option of building data centres (DCs) to the highest security standards in order to guarantee smooth, autonomous operation without interruptions. These centres enable many ACCIONA clients to support large-scale operations.

One of the principal projects in this area was the construction in 2011 of Banco Santander's data processing centre in Brazil to support its operations in Latin America.



### Transmission lines

ACCIONA designs, builds and extends electricity transmission lines and substations. The work comprises engineering, equipment supply for the lines and substations, civil engineering, electromechanical assembly, and commissioning.

ACCIONA has **more than 20 years' experience in the design and construction of transmission networks and substations**

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Some of the company's projects in this field include the construction of low-voltage facilities or lines and substations up to 400 kV. In 2017, it built new electricity transmission networks in Mexico and Kenya. Overall, since 2005, ACCIONA has worked on more than 38 projects in Spain and 35 in the rest of the world.





## WATER SOLUTIONS

ACCIONA is a **leader in water treatment**, with the capacity to design, build and operate reverse osmosis desalination, drinking water and wastewater treatment plants, as well as tertiary treatment of water for reuse

Aware that water is essential for the planet, ACCIONA's water business is committed to innovation and the application of the most advanced technologies, as well as quality in conducting its activities.

ACCIONA processes, purifies, reuses, desalinates and manages water for over 100 million people in more than 30 countries around the world while meeting demanding quality and efficiency standards. It focuses strongly on conserving and regenerating water to meet the current needs of our society without compromising those of future generations.

The end-to-end approach enables the company to cover all phases of the water process up to providing water that is fit for human consumption. It also handles supply to the population and the treatment of municipal and industrial wastewater, together with direct billing to end users.

In 2019, the treatment plants managed by ACCIONA desalinated, purified and treated more than 2.8 million m<sup>3</sup>/day, while the water supplied from primary networks and groundwater sources amounted to 115,000 m<sup>3</sup>/day.

ACCIONA is an established leader in R&D in the water business, based on technology applications and the ongoing digitalisation of the industry. The company focuses on optimising water prices, shortening facility construction periods and increasing the degree of recurrence in end-to-end water management.

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ACCIONA set up a Water Technology Centre, which ranges from laboratories to pilot implementation and scale-up to industrial use. All this work is complemented with computer programmes for modelling with fluid dynamics and for structural design.

ACCIONA's proven capacity in the water business is reflected in innovative and complex projects that incorporate renewable energies, produce biogas or are self-sufficient in energy.

ACCIONA's extensive portfolio of water projects positions the company as the industry leader in the Middle East. The company has the capacity to deliver turnkey projects in that region. Based on its extensive experience, it is ready to start work immediately in areas where there are no specialised suppliers or equipment, contributing its own group of experts and its technology package. Over 50% of the water treated by ACCIONA is in areas of water stress.

ACCIONA has **over 40 years' experience** in water solutions

## Global challenges met by water solutions

- › Population pressure and urban concentration.
- › Climate emergency.
- › Change of the economic model towards a circular economy.
- › Water shortage and water stress.
- › Social inequality

## Need for investment in water solutions between 2019 and 2030 to achieve the SDGs

**2,700**  
billion USD

Source: AFI

## Key management factors

### Resource protection and sustainable approach

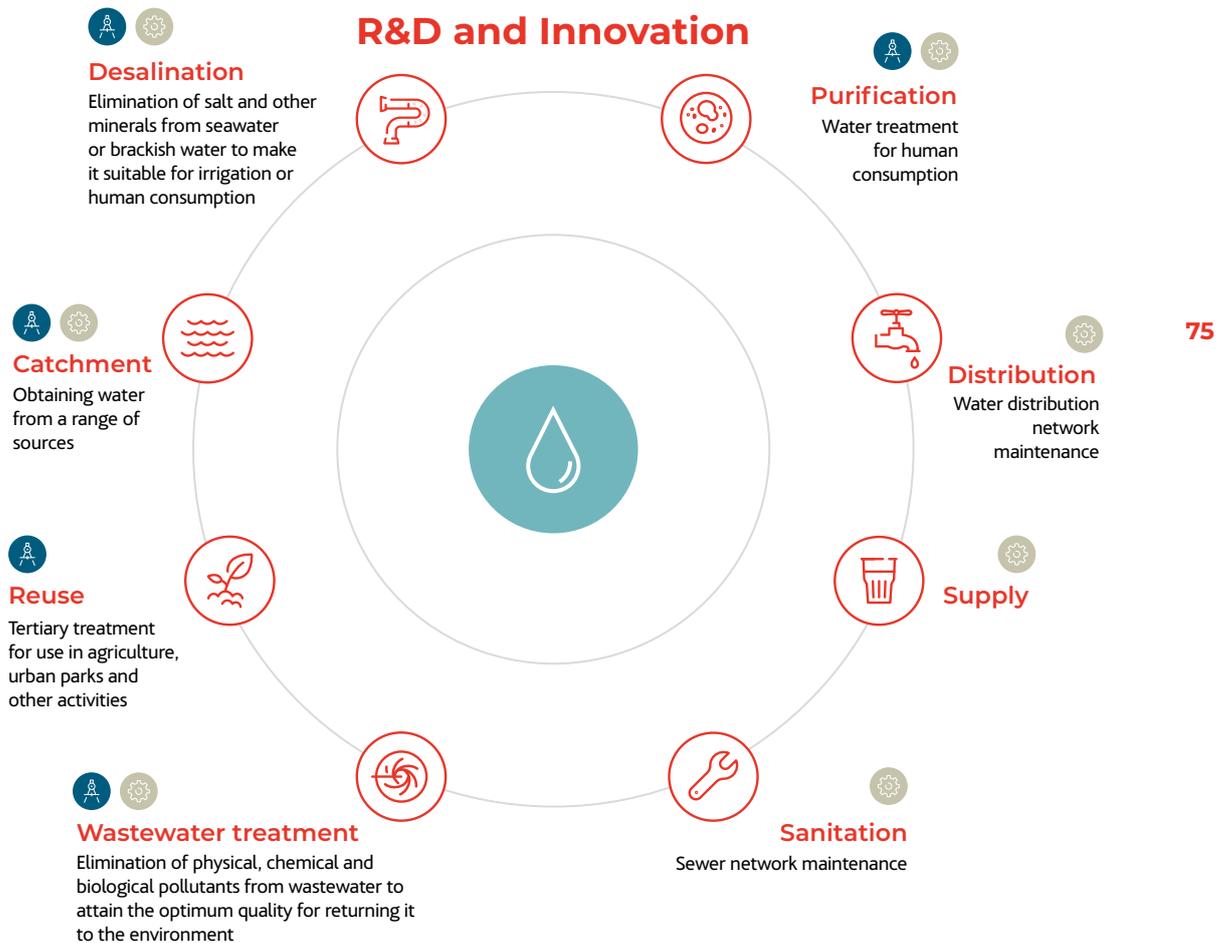
- › Optimisation of natural resource consumption.
- › Minimisation of polluting waste production in processes.
- › Maintenance of management standards for wastewater treatment.
- › Awareness-raising campaigns for end users.



Design and construction



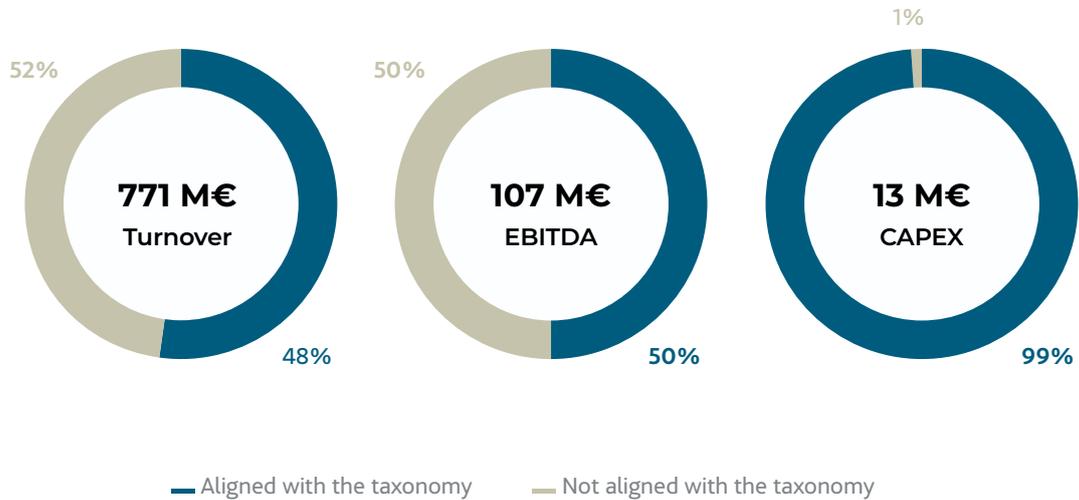
Operation and maintenance



### Innovation applied to plant design, execution and operation

- › Water metering
- › Leak detection and control
- › Smart irrigation
- › Water quality monitoring

**Key figures**



The European taxonomy is a classification tool developed by the European Commission in order to identify activities that contribute significantly to the decarbonisation of the economy. The information refers to fiscal 2019 and was independently reviewed by the company's auditor, whose report is available at <https://www.acciona.com/sustainability/sustainable-finance/>



**Main taxonomy-related factors**

- › Water intake, treatment and supply systems must have an average energy consumption of less than 0.5 kWh per cubic meter.
- › The wastewater treatment systems must replace other methods that generate more GHG emissions.

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**2019 Milestones**

- › Signature of the contract for the Shuqaiq 3 desalination plant in Saudi Arabia.
- › End-to-end water management contract in Boca del Río, Mexico
- › Award of the Ho Chi Minh wastewater treatment plant in Vietnam.
- › Inauguration of the drinking water treatment plant in Saint John, Canada.
- › Award and initiation of work on the pumping system in Antamina (Peru).
- › ACCIONA has built more than 100 desalination plants worldwide, serving more than 25 million people with a total output of just over 4,500,000 m<sup>3</sup> per day.

**Project portfolio in 2019 and 2020**

Project	Solution	Country	Completion	Amount (M€)
Boca del Río	End-to-end management	Mexico	Under way	100
Saint John	Purification	Canada	2019	370
Nhieu Loc Thi Nghe	Wastewater treatment	Vietnam	Under way	200
Shuqaiq 3	Desalination	Saudi Arabia	2021	530
Sedapal service	Water service	Peru	Under way	16
Water supply network	Water service	Paraguay	2020	2,2
Tseung Kwan	Desalination	Hong Kong	Under way	1,042
Water supply network	Water service	Spain	2021	4.6



**End-to-end water cycle**

ACCIONA is involved in all stages of the water cycle. The process commences with gross water intake, continues with purification, maintenance and control of reservoirs, and management of distribution networks, and concludes with supply to the population. ACCIONA also analyses the water in its own laboratories to check its status and ensure that it is fit for human consumption.

ACCIONA also operates and controls water supply and sewer networks.

The cycle closes with treatment of the wastewater to enable it to be returned to the environment or to be reused in other human activities, such as agriculture, with minimal environmental impact.

ACCIONA provides **end-to-end water management services in more than 100 municipalities** in Spain, Peru, Italy and Mexico, serving 13.5 million people

ACCIONA is undertaking a three-year project to optimise end-to-end management of the water cycle so as to reduce energy consumption by 16 GWh/year and avoid the emission of 1,622 tons of CO<sub>2</sub> into the atmosphere. Within this program, remote control systems have been implemented based on GIS and mathematical models, business intelligence and artificial intelligence and the use of acoustic pre-locators, correlators and smart-balls.



## Outstanding projects and cases

### End-to-end water management in Boca del Río (Mexico)

Location: Boca del Río, Veracruz (Mexico). Description: Supply and distribution of drinking water, operation of sewers and wastewater treatment facilities, and management over 50,000 customers. Total users: 150,000. Execution period: 2017- 2047. Client: Boca del Río city government. Investment: contract worth 800 M€. **Strengths: the project includes improving technical efficiency and upgrading existing infrastructure to reduce water losses in the system.**

## Smart water meters

ACCIONA relies on innovation as a means of improving management of water resources. In Zafra, Badajoz (Spain), it has installed 1,200 smart meters equipped with a memory that collects and records data on a daily basis. This information is used to manage the water supply and detect any deficiencies or anomalies in water use that may affect billing. It is planned to replicate the project and implement it elsewhere once it has been optimised.

ACCIONA also launched a novel initiative in the municipality of Andratx, in Mallorca, to improve efficiency in managing the town's water supply network; the town has 10,800 permanent inhabitants and welcomes a large number of tourists.

Between now and 2021, all the meters in the municipality (about 6,500) will be replaced with smart meters with a static sensor based on high-precision magnetic technology, enabling them to be read remotely. The greater precision in data acquisition will enable subscribers to see their water usage online in real time.

The new meters are read using the walk-by method, via radio, which makes it possible to locate leaks immediately. Times will be further shortened with the installation of meter readings via fixed networks in 2020.

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## Water Control Centre (CECOA)

ACCIONA has a Water Control Centre (CECOA), where all the data from multiple sources is logged and analysed to optimise the management of treatment plants and increase their efficiency.

Smart management of the water business combines big data, IoT, machine learning and artificial intelligence to improve decision-making, by anticipating scenarios that improve productivity and reduce energy consumption.



## Desalination

The desalination industry is the most competitive component of ACCIONA's water business thanks to its pioneering treatment processes and its comprehensive vision of the project life cycle. The company is involved in all phases of desalination plant development: design, construction, commissioning and operation & maintenance.

ACCIONA has built **more than 100 desalination plants**, which supply a total of more than 25 million people worldwide

ACCIONA is one of the few companies with a long track record of using reverse osmosis technology for desalination of seawater and brackish water. Application of this type of process has enabled other companies to incorporate these innovations into their designs.

Reverse osmosis is considered to be a sustainable technology since it provides maximal efficiency in water treatment processes through techniques such as isobaric recuperators and low pressure membranes. ACCIONA has installed reverse osmosis desalination plants with a regulation system that dispenses with control valves. The tanks are interconnected and function as one thanks to the design of the filling pipes, which also enables the process to be automated.

LIFE-DREAMER, a project developed by ACCIONA, increased the percentage of water recovery in reverse osmosis seawater desalination systems from 50% to 75%.

The conversion rate of the desalination process also increased from 45-50% to 75%, and 70% of organic carbon dissolved in the reverse osmosis wash streams was eliminated, minimising the final discharge. All these improvements contribute to reducing the specific energy consumption during desalination.

ACCIONA is also a pioneer in the use of big data and data analysis in the operation of its desalination plants.

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## Outstanding projects and cases

### Shuqaiq 3 desalination plant (Saudi Arabia)

Location: Red Sea coast. Description: design, construction, financing and operation & maintenance for 25 years of a reverse osmosis desalination plant. ACCIONA holds an equity stake, is the sole EPC (turnkey) contractor and is a majority shareholder in the operation and maintenance of the facilities. Scale: throughput of 450,000 m<sup>3</sup>/day, to serve an equivalent population of 2 million people. Execution period: 2019-2021. Investment: 420.2 M€. **Strengths: creation of 1,700 jobs from construction to start-up. The company applies the latest developments in reverse osmosis desalination, which optimises energy consumption.**

### Al Khobar desalination plant (Saudi Arabia)

Description: design and construction of the desalination plant, plus a one-year warranty period. Scale: the facility will have a throughput of 210,000 m<sup>3</sup> per day, of which 110,000 will supply various neighbourhoods in the region and the rest will contribute to projects to improve the drinking water quality in the area. Execution period: 2018 – 2020. **Strengths: this plant will be one of the largest in the country, with the capacity to serve a population of 350,000 people as well as industrial facilities. The project generated 1,400 jobs from construction to commissioning.**



## Wastewater treatment

ACCIONA has more than 300 wastewater treatment plants, which treat a total of 20,435,785 m<sup>3</sup>/day, serving more than 71 million people. The innovative treatments applied by the company in these plants include biological purification processes, sludge minimisation and reuse of treated water.

One of these new techniques is the application of the substances obtained in the treatment process as additives for secondary sludge pretreatment. Laboratory and pilot scale experiments have shown that this method increases biogas production by 57% and the methane content by 45%, improving the energy performance of anaerobic digestion.

### ACCIONA has over 300 wastewater treatment plants

In the framework of the STARNIT project, ACCIONA evaluates the use of sludge by-products to optimise nitrogen removal in the main water treatment line, thus reducing energy demand and sludge production.



### Outstanding projects and cases

#### Nhieu Loc Thi Nghe wastewater treatment plant (Vietnam)

Location: Ho Chi Minh City. Description: design, construction, and operation & maintenance for five years. Scale: 34,000 m<sup>3</sup> per hour. Users: will serve 1 million people. Execution period: 2019-2030. Investment: 235 M USD. **Strengths: the plant will include a pumping station, biological treatment, disinfection, sludge processing and odour elimination. There will be 800 employees at peak times and the staff will receive close to 25,000 hours of training in quality and safety.**

## Smart wastewater treatment plants

ACCIONA has incorporated technologies and interconnected processes at the La Almunia (Zaragoza, Spain) and Arroyo Culebro (Madrid, Spain) wastewater plants to make them more efficient and autonomous.

The Internet of Things (IoT), Information Technologies (IT) and Field Technologies (FT) enhance quality control and monitoring of the plant. Virtual and augmented reality is applied in remote assistance for operations and maintenance; the information that is acquired is stored in a database that helps ensure that calculations in connection with processes and energy consumption are more reliable.



## Purification

ACCIONA develops innovative solutions for problems associated with drinking water treatment, including the process of separating components present in water in its natural state by precipitation or filtration of impurities, and disinfection with chlorine or ozone. Once the purification process is complete, the water is analysed to ensure it is optimal for human consumption in line with the local legislation.

ACCIONA provides more than 41 million people with **safe access to drinking water**

Overall, ACCIONA has built 120 drinking water treatment plants with a total capacity of more than 8.5 million m<sup>3</sup>/day.



## Outstanding projects and cases

### Saint John drinking water treatment plant (Canada)

Location: Saint John, New Brunswick (Canada). Description: design, construction, operation, refurbishment and finance. Scale: throughput of 75 million litres per day and a storage tank with a capacity of 33 million litres. The plant will serve 70,000 people. Execution period: 2017-2019. Operation of the plant from 2019 to 2047. The project also includes improvements to pumping stations and the water storage system, replacing 20 km of pipes and upgrading 10 km. **Strengths: water treatment is carried out at low temperatures to ensure that disinfection occurs not only with chemical disinfectants but also using ultraviolet radiation.**

### José G. Rodríguez drinking water treatment plant (Panama)

Location: Arraján district (Panama). Description: Design, construction, operation and maintenance. Scale: throughput of 227,000 m<sup>3</sup>/day. The plant will serve 283,000 people. Execution period: 2017-2020. **Strengths: the project created opportunities for small and medium-sized companies in the country to supply goods and services. Additionally, clerical and construction staff were trained in environmental responsibility.**

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## Reuse

By investing in technology and innovation, ACCIONA reuses treated wastewater and water from desalination processes.

Based on the core ideas of the circular economy, the company achieved an up to 44% increase in the use of recycled water, reused water and rainwater, basically from wastewater treatment plants. The treated water produced by four wastewater treatment plants in Egypt, which serve a population of 500,000 people, is reused for irrigation.

ACCIONA also engages in initiatives to reuse the waste produced by wastewater treatment plants. An example is the La Escalerilla treatment plant in Arequipa (Peru), where the solid waste produced in the wastewater treatment process is reused as fertilizer for farming.

In this line, the Watintech Project, developed in 2016, proposes to convert wastewater treatment waste into useful products that can avoid corrosion or neutralise odours in sewer networks, or fuel to power the treatment plants.

With this approach, what were formerly waste products become products that enhance the system and its procedures and optimise the treated water for reuse.

ACCIONA also devotes a line of research to the treatment of water from other industries, such as mining and metallurgy, and the membrane wash water from desalination plants, with the aim of improving the quality of treated effluents (when discharged) or facilitating the reuse of water (in regeneration).

Physicochemical techniques such as dissolved air flotation (DAF) and electrochemical systems (electrocoagulation or electro-oxidation) are being used to separate pollutants in complex waters.



### Outstanding projects and cases

#### Reuse of industrial water

ACCIONA can take water that is not for human consumption, i.e. water from industrial processes, and reuse it in a range of applications.

An example is the Cerro Negro Norte mine, in the Atacama desert (Chile), which uses the water produced by ACCIONA's desalination operations on the coast, 81 kilometres away.

Mining is a water-intensive industry; ACCIONA distributes water to the various phases of the industrial cycle and is able to reuse part of it in farming.



### Water services for cities

ACCIONA provides end-to-end water management, water supply and sewerage services. These services cover both corrective maintenance and the repair of supply structures as well as customer management and direct user support.

In the area of technological innovation, the GOTA project is a computer platform for providing overall control of information in water supply and sewerage services. It provides structured information on the status of networks and facilities, making it available to both clients and company workers.



## Outstanding projects and cases

### Sedapal service (Peru)

Location: Lima (Peru). Description: corrective maintenance of drinking water and sewerage systems, including repair or replacement of pipes, sewers and household connections. Partner: EULEN (50%). Scale: 61 km of water mains and sewer pipes, replacement of more than 17,300 household connections and maintenance of valves, fire hydrants and metering equipment. Users: serving 7 million people. Execution period: 2013–2018. Investment: contract worth 16 M€. **Strengths: during contract delivery, sewer pipes were replaced using the trenchless "pipe bursting" technique. This technique makes it possible to avoid cutting traffic and basic services and the closure of commercial establishments. It also reduces the production of rubble and the risk of damaging other installations, while also achieving higher performance and cutting the cost of the work by up to 30%.**

### Automation of the water supply system (Paraguay)

Location: Asunción (Paraguay). Description: Optimisation of the drinking water supply by installing a remote control system for the supply network. Scale: includes automation and remote control of the Viñas Cué drinking water treatment plant, 16 wells and 15 distribution centres. Users: serving 1.5 million people. Execution period: 2018, followed by operation and maintenance for 18 months. Investment: project worth 2.2 M€, financed by the World Bank.

## Carbon fibre tubes

A pipe repair technique using on-site construction of new carbon fibre pipes within the old pipes represents a major innovation.

This system avoids the need for trench digging or larger works in order to perform repairs, so it minimises the impact on citizens in the nearby communities.

The technique consists of the direct application of carbon fibre inside the framework of the existing pipe, which saves the cost of replacing the entire pipe system. An added advantage is that the new pipe is more durable, as the carbon fibre lining has a useful life of 40 years.

This innovation has already been used in areas of Madrid and four other large towns in the Madrid region.

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## SOCIAL SOLUTIONS

ACCIONA's approach to its **infrastructure solutions for health, education and cultural engineering**, as well as solutions for preserving ecosystems and cleaning the natural environment, is based on the core values of the welfare society

ACCIONA designs, builds and operates social infrastructure with the aim of placing people at the centre of its activity. It also has highly specialised professionals and the most advanced materials and technologies to carry out these types of operations efficiently and safely.

In the field of Healthcare, the company operates and manages hospitals and delivers ambulance and social care services. A common feature of healthcare infrastructure is that it tends to be managed as a unit, like a type of "mini-city", which can also promote job creation.

The company's services enable elderly, disabled, dependent and chronic patients to receive special high-quality and efficient care through a comprehensive offer of complementary health services.

In the academic field, ACCIONA has extensive experience in managing student dorms and other buildings.

The company is also a leader in event design, management and production. This comprehensive service enables ACCIONA to cover deliver large international projects in such fields as museums and art. Through technological and social innovation and sustainable development, ACCIONA has the ability to showcase the cultural heritage of the places where it operates.

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ACCIONA has **over 30 years' experience** in delivering social solutions

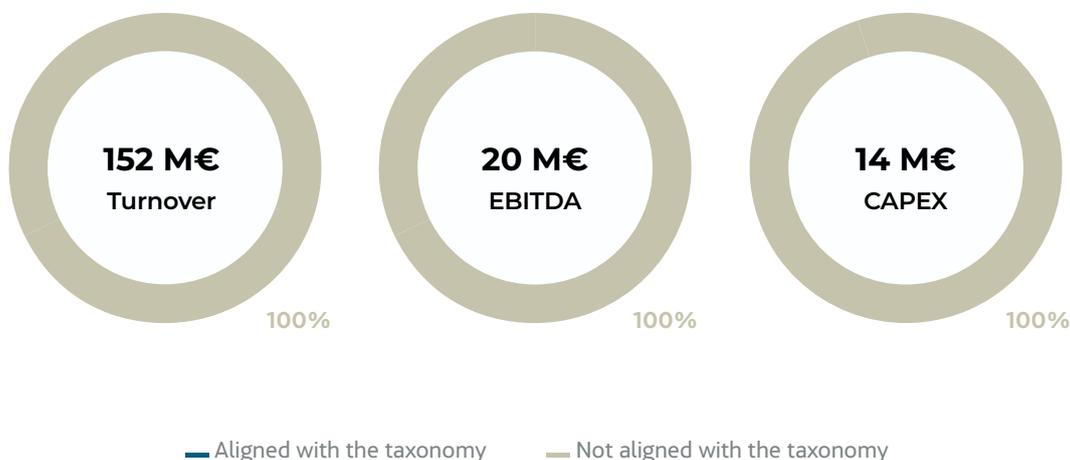
### Global challenges met by social solutions

- › Population pressure and urban concentration.
- › Social inequality.
- › Resilient societies.

**Need for investment** in social solutions between 2019 and 2030 to achieve the SDGs

**3,200**  
billion <sup>USD</sup>

Key figures



Social solutions are classified as not aligned with the EU taxonomy, as the degree to which they fulfil the criteria has yet to be examined in detail. The company estimates that part of the turnover will qualify for the taxonomy. This would be the case of the hospitals built and managed by the company, which are certified to the highest energy efficiency standards (BREEAM, LEED).



2019 Milestones

- › Spain's National Archaeological Museum (MAN) and ACCIONA produce a 3D-printed replica of the Romanesque arch of San Pedro de las Dueñas (León, Spain). The company also digitised a total of 30 medieval items in the Museum so that visitors can manipulate them via an interactive screen.
- › ACCIONA received an award in the 5th National Facility Management Services Awards for the Management with BIM and Immersive Technologies project.
- › Construction of the new hospital in Toledo, one of the largest in Europe, concluded and the operation and maintenance phase commenced.
- › The Infanta Sofía Hospital in Madrid, built and managed by ACCIONA, received an award at the BREEAM AWARDS 2020 on 2 March 2020 in the category of "Public building in use" for its energy efficiency measures. It was the only Spanish project to be nominated.



Healthcare

Many of ACCIONA's projects in the hospital services area are managed through public-private partnerships (PPP). This approach covers the development, construction, financing and maintenance of the facility, as well as the delivery of non-clinical services.

The company's mission is to create long-term partnerships with its clients for the comprehensive management of hospital infrastructure projects. It also aims to achieve global leadership in this field thanks to solutions that encompass the design, construction and operation of hospitals that stand out for being accessible, efficient, sustainable and innovative.

ACCIONA also provides other services in the area of healthcare: ambulance services and social services.

ACCIONA **contributes to the well-being of society** with the construction, comprehensive management and financing of social infrastructure. It has extensive experience in the field of hospitals and universities, in particular



### Outstanding projects and cases

#### Infanta Sofia Hospital, Madrid (Spain)

Location: Madrid (Spain). Participation: design, construction, financing and services concession. The concession does not cover healthcare-related services. It covers non-clinical services such as foodservice, laundry and logistics. Scale: 90,000 m<sup>2</sup> and 254 beds. Construction finalised: 2010. **Strengths: This hospital was named the most sustainable “public building in use” in Europe at the BREEAM Awards 2020 because of the measures adopted, both in its design and in the concession, to achieve energy efficiency and reduce water consumption. The Infanta Sofia Hospital has reduced CO<sub>2</sub> emissions by 30%, natural gas consumption by 55%, water use by 24% and electricity consumption by 19%.**

#### Vigo Hospital (Spain)

Location: Vigo (Spain). Participation: construction of the new hospital in Vigo and delivery of certain non-clinical services at this and two other hospitals for 23 years. Scale: 279,837 m<sup>2</sup>, 1,645 beds, 35 operating rooms, 160 outpatient offices. It will serve a population of 575,000. Construction finalised: 2014. **Strengths: the building obtained BREEAM ES certification. The project received the “Future Health Project 2012” award from the International Academy for Design and Health as best European project in the field of health.**

## FAMILYAR social technology platform

In the area of home care for the elderly, ACCIONA has created the FAMILYAR social platform, a service based on simple, safe interaction between the elderly, their families, public administrations and healthcare professionals. The system pursues the following goals: promote active ageing and avoid the social isolation of the elderly; improve their safety and monitor their habits; provide a broad range of domestic services as well as specialised services to attend to specific needs and pathologies.



## University campuses

ACCIONA currently has five student dorm management concessions in Spain. Located in the provinces of Albacete, Castellón, Cádiz, Lérida and Murcia, they were awarded between 1996 and 2002, with a contract to operate them for 50 years from the end of construction.

The company's concessions division also has two projects at universities, which together total more than 50,000 m<sup>2</sup>: Polytechnic University of San Luis Potosí, in Mexico, and the Law School extension at the University of Barcelona, in Spain. Part of ACCIONA's new business strategy is to expand its portfolio of projects in the field of public buildings.



## Outstanding projects and cases

### Loreto project (Australia)

Location: Toorak (Australia). Description: gender-balanced construction project to build a girls' school, one that is relatively small but has a large impact. Start up: 2020. Duration: 6 months. **Strengths: 50:50 gender diverse workforce has been brought together by means of an advertising campaign aimed at attracting qualified and experienced female labour. Recruitment was completed successfully. ACCIONA has partnered with Dattner Group and Tradeswomen Australia to reinforce training services in diversity and inclusion.**



## Ecosystem regeneration

ACCIONA has been providing ecosystem renaturation services for more than 30 years through its environmental business, which is specialised in the cleaning, maintenance and conservation of natural environments, coasts and linear infrastructures.

ACCIONA applies a business model that is dimensioned and ready to serve the client in all phases of the project, from development of the idea to execution of construction and subsequent maintenance.

Its main services in the context of managing the non-urban environment are: afforestation, reforestation and replanting; forest control and maintenance (including fire prevention); construction of rural, forestry and anti-erosion roads; channel cleaning; sand cleaning and sanitisation; seaweed removal, transport, drying and recovery; collection of waste from beach cleaning, and maintenance and repair of beach facilities. In all these tasks, ACCIONA analyses each client's specific needs and quickly identifies areas for improvement and savings in order to offer the most appropriate solutions.

### ACCIONA provides comprehensive solutions for beach and forest maintenance

In relation to ecosystem regeneration, ACCIONA also has techniques for river renaturation, mitigating the effects of climate change and recovering water capacity. As is common in all these projects, ACCIONA applies quality, environmental and sustainability policies throughout the process, such as the use of electric machines and vehicles and the recycling of materials to minimize CO<sub>2</sub> emissions.



## Outstanding projects and cases

### Beach cleaning service (Spain)

Location: Torrevieja, Almería and Carballo (Spain). Scale: 16 beaches. Commissioning: 2008, 2015 and 2020, respectively. **Strengths: use of electric machinery and vehicles.**

### Regeneration and conditioning of 13 beaches in 7 municipalities (Dominican Republic)

Location: 7 coastal municipalities in the Dominican Republic. Scale: 13 beaches. Start up: 2016. Duration: 30 months. Participation: construction of a number of port infrastructures and dikes, dredging and supply of sand to beaches, raising of existing roads, installation of mooring buoys and ancillary equipment, walkways on the sand, and cleaning. **Strengths: use of electric machinery and vehicles.**



## Museums and the arts

Since 1990, ACCIONA Producciones y Diseño (APD) has been working on large-scale international projects in the field of museums and exhibitions, World Expos and indoor and outdoor events. It provides end-to-end solutions to public and private clients covering all phases of a project: consulting, planning, design, production, technical and artistic operation, exploitation and marketing. Quality, excellence and exclusivity are features of its productions and have earned it extensive recognition in the industry.

This division has 200 employees at offices in Europe, Latin America, Africa and the Middle East, and it has carried out projects in 37 countries. Its portfolio includes major cultural events in countries on the five continents, such as Russia, China, Australia, Egypt, Brazil, Kuwait, Bahrain, South Africa, Poland, Belgium, Canada and the United States, to name just a few. Its leadership is widely recognised and it has received more than 40 awards for creativity, innovation and sustainability, for the masterful combination of different disciplines (design, architecture, art history, engineering and audiovisual communication).

APD is a leading creator of cultural and branding projects with high technological and interactive content. Its great technical and financial capacity, supported by a powerful and experienced team of professionals, makes it possible to undertake several events simultaneously anywhere in the world. Its success is mainly due to its comprehensive, sustainable approach to projects — of great technical and creative complexity — which are carried out equally in global and local settings, with international partners and suppliers, combining multidisciplinary and multicultural teams, often working in tight deadlines.

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In 2019, international business accounted for 91% of APD's total turnover, with projects in Mexico, the United Arab Emirates, Qatar, Panama and Egypt. As part of its internationalisation strategy, the company added two new markets in recent years: Latin America and Africa. Saudi Arabia, Australia and Russia are currently strategic countries in this line of business.

APD engages in "Cultural Engineering", which consists of leveraging the historical and cultural heritage of a place using the most advanced visual and sensorial technology under criteria of sustainability. Its cultural projects make the content accessible and inclusive to visitors while promoting the local development of the places where they are implemented.

Through APD, ACCIONA creates unique cultural experiences that stimulate emotions and awareness in a 21st century audience using a playful, didactic approach. For this reason, the company specializes in the development of participatory innovation and interactive elements that contribute to a better understanding of the content. These immersive environments seamlessly integrate the physical and digital environment by appropriately combining state-of-the-art resources with more traditional ones. They produce impactful settings that create a strong bond with visitors.

In all its projects, APD creates museographic resources that provide interactive access to information, making culture accessible. It uses techniques such as mapping and large format projections, interactive kiosks, gamification, photoboosts, mechanical interactives, 3D printing and virtual or augmented reality.



### Outstanding projects and cases

#### Visits to Qasr Al Watan, the Presidential Palace of Abu Dhabi (United Arab Emirates)

Location: Abu Dhabi (United Arab Emirates). Scale: technical development and implementation of the main rooms of the building – three of them museographic – to make them accessible to citizens and tourists. Implementation: 2019. **Strengths: Cultural engineering project over an area of 12,000 m<sup>2</sup>, enabling the Presidential Palace to become a cultural symbol of the values and traditions of the United Arab Emirates.**

#### National Museum of Qatar, Doha (Qatar)

Location: Doha (Qatar). Scale: 149 audiovisual and interactive installations located along 11 galleries measuring 1.5 km in length. **Strengths: provides context and tells the historical, geographical, economic and social development of Qatar in an interactive format so as to provide an understanding of the country's culture. APD filmed at historical locations and conducted interviews that were combined with more than 5,000 images licensed from 100 institutions and image banks from around the world.**

#### Grand Egyptian Museum (Egypt)

Location: Giza (Egypt). Scale: technical development and museographic implementation of four rooms, with a floor area of 12,000 m<sup>2</sup>, including the Tutankhamen gallery. With a total area of 50 hectares, the Grand Egyptian Museum will be the largest archaeological museum in the world; dedicated to Ancient Egypt, it will house approximately 100,000 items, 25,000 of which have never been exhibited before, and it is expected to receive about 5 million visitors per year. Commissioning: planned for 2020. **Strengths: the highlight of the museum visit is the Tutankhamen gallery, which will display the pharaoh's entire legacy – about 4,000 objects of which only 1,500 have been exhibited to date. This is the most complete of all the museum's collections.**



### Universal and international exhibitions

ACCIONA Producciones y Diseño was founded to provide specialised services to the 1992 Universal Exposition in Seville; since then, it has participated in the development of exhibition projects and events for World Expos and International Exhibitions. The company has a division that is specialized in Expos, equipped to undertake pavilion design and layout and the organisation of events and shows held within the framework of Expos.

## Expo 2020 in Dubai (United Arab Emirates)

Expo 2020 in Dubai, the first global event to be organised in the Middle East, will be attended by over 200 countries and international organisations. Its theme will be "Connecting Minds, Creating the Future". Expo 2020 aims to create a global platform that fosters collaboration on a worldwide scale to address the most urgent problems of our time around three interconnected themes: Opportunity, Mobility and Sustainability.

APD will have a prominent presence at the Expo, as it will execute numerous exhibition projects and events for more than 40 countries and international organisations, including the pavilions for Sustainability, the United Arab Emirates, Spain, Expo Live, and 46 pavilions in the thematic districts.



### Outstanding projects and cases

#### United Arab Emirates Pavilion

Location: Dubai (United Arab Emirates). Scale: technical development of the exhibition design and implementation in a 5,500 m<sup>2</sup> space. The UAE pavilion was designed by architect and engineer Santiago Calatrava and is permanent, so it will remain a cultural icon of the country after the Expo.

**Strengths: showing the history, heritage and future of the Expo's host country through state-of-the-art audiovisual technologies and highly participatory multi-sensorial immersive experiences.**



### Event design and management

ACCIONA Producciones y Diseño is an expert in creating experiences through brand interaction. Its event design and management projects adopt an innovative approach, using cutting-edge resources and considerable amounts of communication and creativity to connect with the public in a direct and enjoyable way.

The company is also a pioneer in the development of live communication, a unique way of transmitting brand values through specific *ad hoc* actions and a people-oriented focus. It also uses multi-platform formats and tools based on the latest technology. For example, APD incorporates 360° strategies that make it possible to connect with audiences through a range of channels and structures, personalising the experience according to tastes and needs. The event production and management business, which has been 100% carbon neutral since 2012, offers services such as: design (consulting to define the concept, script and content), production (planning, costing, feasibility studies, logistics, execution), multimedia (art direction, storyboarding, audiovisual production) and marketing and communication of events (social media campaigns, e-mails, sponsorship and patronage, media management, PR and protocol).

## ACCIONA Producciones y Diseño (APD) acquires Auriga and establishes itself as the leading event organiser

In 2019, APD reached an agreement to buy event agency Auriga with the aim of reinforcing its lead in the sector and accelerating growth into new segments.

By adding Auriga to its events division, APD expanded and diversified its offer of brand management in B2B (Business to Business), B2C (Business to Consumer) services and motor experiences, in which Auriga is an industry leader.

The complementarity between the companies enables us to offer a distinctive, comprehensive service in managing events of all kinds, combining creativity and innovation to generate strategies with a high communication and commercial impact.

Founded in 1999, Auriga provides a highly-trained team and a diversified client portfolio in sectors such as automobiles, beverages, technology, decoration, beauty and communication. It is one of the most prestigious agencies in the industry, with over 80 international awards, 40 of which were received in 2019.



## Outstanding projects and cases

### Audiovisual show

#### 500 years of Panama City (Panama)

Location: Panama City (Panama). Scale: design, production and assembly of the audiovisual mapping show with which Panama commemorated, in 2019, the fifth centenary of the foundation of its capital city. The visual and musical story looked back at milestones in the history of the city and the country. **Strengths: projection on a sculpture measuring 4 metres high and 7 metres wide that was created specifically for the event. The show was held at three different locations, making it accessible to all local residents and tourists. It was seen by more than 10,000 people.**

#### Santalucía 2019 Sales Convention (Spanish)

Location: Palma de Mallorca (Spain) Scale: design, production, support in the organisation and logistics of Santalucía's Annual Sales Convention. More than 1,000 people participated. **Strengths: end-to-end management of the Convention by creating and staging the event's graphic identity, including the logo and the tagline on a number of media. Design and production of all the audiovisual items and speaker presentations. Dinner at the Pueblo Español museum venue, Palma de Mallorca.**





## SOLUTIONS FOR CITIES

ACCIONA sees cities as the main venue where the great transformations of our time are taking place. **It has a unit specifically configured to apply SMART solutions** to the main challenges of building, mobility, water management and the circular economy

ACCIONA develops urban solutions with an integrated and long-term vision, covering all public services that local administrations may require to meet citizens' needs.

In addition to providing access to essential services, such as energy and water, the company contributes to making cities into places of well-being, favouring people's socio-economic development.

ACCIONA addresses issues such as improving waste management and the related infrastructure, revitalisation of cities through green areas and clean, agile, efficient mobility, with a sustainable approach to enhance living standards for city dwellers. A significant part of its urban solutions involves shared economy solutions, whether exchanging vehicles, spaces or services such as heating.

ACCIONA has more than **40 years of experience** in offering solutions for cities

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**Global challenges** met by solutions for cities

- › Population pressure and urban concentration.
- › Climate emergency.
- › Change of the economic model towards a circular economy.
- › Social inequality.

**Need for investment** in city solutions between 2018 and 2030 to achieve the SDGs

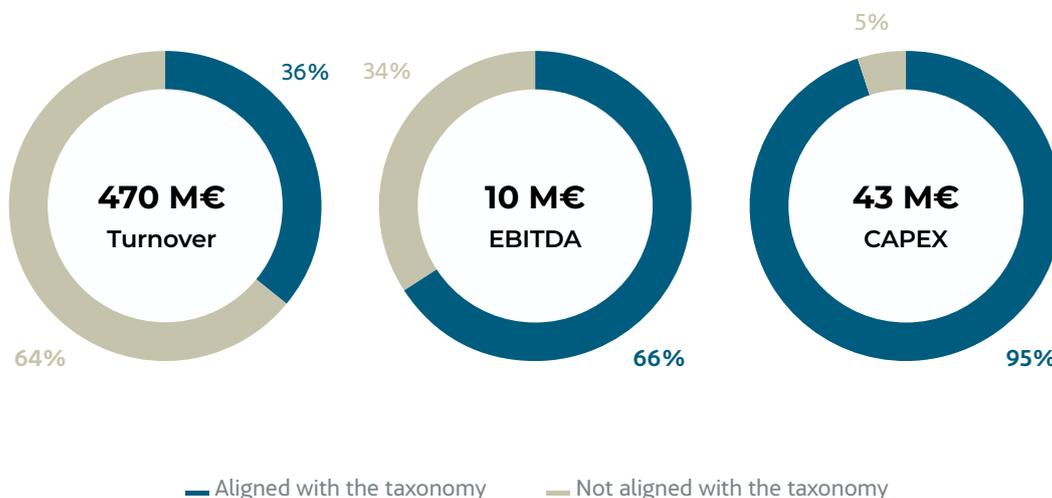


**26,500**

billion USD

Source: AFI

Key figures



The European taxonomy is a classification tool developed by the European Commission in order to identify activities that contribute significantly to the decarbonisation of the economy. The information refers to fiscal 2019 and was independently reviewed by the company's auditor, whose report is available at <https://www.acciona.com/sustainability/sustainable-finance/>



Main taxonomy-related factors

- › Zero direct emission vehicles, such as our electric scooters, automatically qualify for the taxonomy.
- › Non-hazardous waste must be collected and transported separately to ensure proper reuse and/or recycling.
- › A new building is aligned with European taxonomy if it meets national Near Zero Energy Building (NZEB) standards and its energy performance is equivalent to a B rating or higher.

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2019 Milestones

- › ACCIONA deployed its scooter sharing service in 7 cities in the Iberian peninsula, with over 6,000 electric scooters in operation.
- › Contract for the Ness Energy plant (United Kingdom), ACCIONA's largest waste-to-energy project, ahead of the Kwinana project (Australia) that was awarded in 2018.
- › Contract for the East Rockingham waste-to-energy plant, Australia's second large-scale plant of this type. ACCIONA is the main EPC contractor, and it also holds an equity share (the first time ACCIONA has invested in waste-to-energy).
- › Maintenance and upkeep of eight historic protected parks in Madrid (Spain)
- › More than 9,000 homes built in Spain, Mexico, Portugal and Poland since the company began.



## Electric vehicles

ACCIONA is a leading player in sustainable mobility, as it has deployed its shared mobility solution throughout the Iberian peninsula: a fleet of zero-emission electric scooters. More than 6,000 electric scooters are available to users in 7 cities, and the service is being expanded to other countries.

The scooters are powered by 100% renewable energy, and they stand out from rival services because of their range and power. This service encourages multimodal transport and can be coordinated with other municipal mobility systems and platforms. The maintenance service, which uses 100% electric vehicles, swaps in fully recharged batteries during the night.

As an awareness-raising exercise, users receive real-time information on the CO<sub>2</sub> emissions they have avoided on their trip. To improve the user experience, the app was thoroughly analysed and reworked to adjust user incident reporting and various features have been upgraded.

Over **6,000 electric scooters available**  
for users

ACCIONA also offers parking management solutions based on the OPEN PARKING SYSTEM technology, a comprehensive real-time management and control system for on-street parking in cities.



## Outstanding projects and cases

### Scooter sharing service (Europe)

Location: Barcelona, Madrid, Lisbon, Seville, Valencia, Zaragoza and Milan. Scale: over 6,000 scooters. **Strengths: three drive modes to adapt to streets and speedways. Each shared vehicle avoids 10-15 private car trips per day and shortens travel time to up to one-seventh.**



## Waste management

ACCIONA promotes the circular economy by extending the useful life of resources. ACCIONA's approach is to maximise efficiency in waste collection, transport and management. The company relies on technology and innovation in order to optimise routes, sensorise bins and obtain new materials. It collects and transports organic, glass, paper, cardboard, packaging, furniture and vegetation waste for composting, among others. The company also supplies, installs, maintains and washes municipal waste bins. It manages waste treatment and transfer plants, closing the waste management cycle and enabling optimisation of the means of transport.



## Waste to energy

ACCIONA promotes the circular economy and strives to extend the useful life of waste at all times, preventing it from being disposed of directly in landfills. Waste that cannot be reused or recycled is converted into energy through incineration or other recovery techniques, such as biogas production from landfills.

Waste-to-energy plants will dispose of up to **850,000 tons of municipal waste per year**, producing up to 619 MWh of electricity



### Outstanding projects and cases

#### Ness Energy Waste-to-Energy plant (United Kingdom)

Location: Aberdeen, Scotland. Description: engineering, procurement and construction (EPC) contract, plus a 20-year operation and maintenance (O&M) contract for a waste-to-energy plant. Duration: 2019 – 2039. Investment: 400 M€. **Strengths: waste abatement and the possibility of converting 150,000 tons of residual municipal waste into electricity.**

#### East Rockingham waste-to-energy plant (Australia)

Location: East Rockingham. Description: construction of a plant to process 300,000 tons of waste per year and turn it into energy. The facility will treat municipal waste from commercial and industrial sources. It will also recover around 73,800 tons of ash per year, which will be processed for use in road surfacing and other construction materials. ACCIONA is the main EPC contractor and also has an equity stake. Duration: 2020 – 2023. Investment: 320 M€. **Strengths: about 29 MW net renewable electricity capacity, sufficient to power more than 36,000 homes, which will avoid the emission of more than 300,000 tons of CO<sub>2</sub> per year or the pollution generated by about 64,000 cars.**

#### Kwinana waste-to-energy plant (Australia)

Location: Kwinana-Perth, Western Australia. Scale: 36 MW. Duration: 2018 –2020. Investment: 700 M AUD (about 434 M€). **Strengths: the first large-scale plant of its type in Australia and a milestone in the development of waste-to-energy technology by reducing landfill use and using waste to generate renewable energy. It will process up to 400,000 tons of waste per year, the equivalent to the waste produced by 50,000 homes.**



### Urban ecosystems

ACCIONA is specialised in the maintenance and upkeep of public spaces, providing comprehensive management of urban green areas. The company undertakes landscape improvement plans for municipalities, environmental impact studies on the landscape, environmental regeneration of natural spaces with artistic value, and maintenance projects, among other activities. In the field of gardening, it serves urban, public, corporate and thematic gardens, as well as maintenance of historic gardens. It also installs, maintains and operates irrigation networks in urban areas.

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### Outstanding projects and cases

#### Historic protected parks in Madrid (Spain)

Location: Madrid (Spain). Duration: 2014 – present. Description: maintenance and upkeep of Madrid's eight most emblematic parks, which are listed as Sites of Cultural Interest or contain heritage items that are more than a century old. ACCIONA provides the following services: gardening, cleaning, surveillance, urban furniture, municipal buildings and facilities, lighting and sanitation networks, ornamental fountains and fauna. **Strengths: conservation of more than 300 hectares of green areas that constitute small ecosystems with their specific fauna and flora. The contract is delivered with electric machinery and vehicles.**



## Efficient building

ACCIONA offers efficient solutions in the field of building, having participated in the design and execution of pioneering projects in this area in Spain, such as zero-emission and bioclimatic buildings, and LEED- and BREEAM-certified buildings.

The new legal and environmental framework gives priority to solutions that save energy and material resources, within a comprehensive approach to economic profitability.

From the beginning of the design of building interiors and exteriors, ACCIONA considers the efficient use of materials and systems, as well as their location (climate, environment and existing resources). Throughout the process, ACCIONA complies with development and sustainability criteria in pursuit of energy saving, rational water use, clean construction and sustainable design.

In addition to the construction of efficient buildings, the company carries out energy rehabilitation of buildings in line with the legislation and regulations promulgated in Europe, such as the EU's Energy Efficiency Directive and the Energy Performance of Buildings Directive, which promotes Nearly Zero Energy Buildings.

**More than 9,000 homes built** in Spain, Mexico, Portugal and Poland

ACCIONA has a working group dedicated to researching energy efficiency in new buildings. In this area, it is working on computer simulations of energy consumption by buildings; passive architectural solutions that can cut household energy costs; compilation of data on the performance and returns of more environmentally friendly air conditioning and lighting installations; innovations in the field of energy saving and efficiency; and the use of computer tools for life-cycle analysis.



## Outstanding projects and cases

### RE4 (European Union)

Description: promotion of new technologies for the development of precast components with a high percentage of recycled materials and reused structures from demolished buildings. Duration: 2016-2020. Partners: the project is coordinated by Centro di progettazione, Design & Tecnologie dei materiali (CETMA) and has 12 participants, including ACCIONA. **Strengths: a high level of reuse of construction and demolition waste.**

### CITYFIED project (Spain)

Location: Torrelgo, Valladolid. Description: energy analysis and definition of a sustainable urban rehabilitation strategy, applying Building Information Modelling (BIM). Financing: co-financed by the European Commission. **Strengths: development of strategies to move towards near-zero energy consumption in cities by reducing energy demand and greenhouse gas emissions, combined with increased use of renewable energy sources. The project obtained the Castilla y León Sustainable Construction award in the Multi-Family Residential category.**

## New smart façade produces near-zero energy consumption in refurbished buildings

Buildings account for 30% of total energy usage. In 2019, the BRESAER R&D project, headed by ACCIONA's Construction Technology Centre, completed the development of a smart façade for energy rehabilitation of existing buildings to turn them into homes and offices with near-zero energy consumption.

This solution entailed the development of a new type of adaptable, modular and flexible envelope that is overlaid on the façade and roof of an existing building. These features allow for customised designs in building rehabilitation.

This technique was applied, monitored and validated at full scale and achieved a 30% reduction in heating and cooling demand, increased the solar thermal contribution to climate control by 35%, and met 15% of the electricity demand via photovoltaic panels.

This project, co-financed by the European Commission through its H2020 program, involved 17 partners from 9 countries

## ACCIONA zero emissions building (Spain)

ACCIONA's regional headquarters in Navarra does not produce CO<sub>2</sub>. It is the first large zero-emission service building to be built in Spain, and the activities carried out inside it focus entirely on renewable energy.

The structure was designed to save over half (52%) of the energy consumed by a conventional building and meet the remainder with renewable energy. It was built to optimise energy savings, use renewable sources and maximise energy efficiency.





## REAL ESTATE SOLUTIONS

The company **focuses on real estate development, supported by a range of complementary services** aimed at designing the sustainable cities of the future

ACCIONA's Real Estate business focuses on developing and managing residential and non-residential complexes, and it aspires to excellence through the application of the latest technology and the use of high-quality materials and finishes. This goal is informed at all times by its commitment to the environment and to social well-being.

ACCIONA is a pioneer in building eco-efficient homes that promote energy saving as well as environmental and social values, referring to waste, water consumption, social impact and biodiversity.

ACCIONA's Real Estate projects are located in Spain, Poland, Mexico and Portugal; the key to its success lies in solid technical and commercial experience. The business strategy focuses on assets with high returns, the application of sustainability criteria in the design of eco-efficient homes, and international expansion.

ACCIONA is also open to new business opportunities in non-residential assets: offices, hotels and industrial buildings. The company is also involved in urban and social regeneration of areas that were originally on the outskirts of cities and are now isolated in the city core as a result of expanding population.

ACCIONA has **over 30 years' experience** in Real Estate solutions

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### Global challenges met by solutions for cities

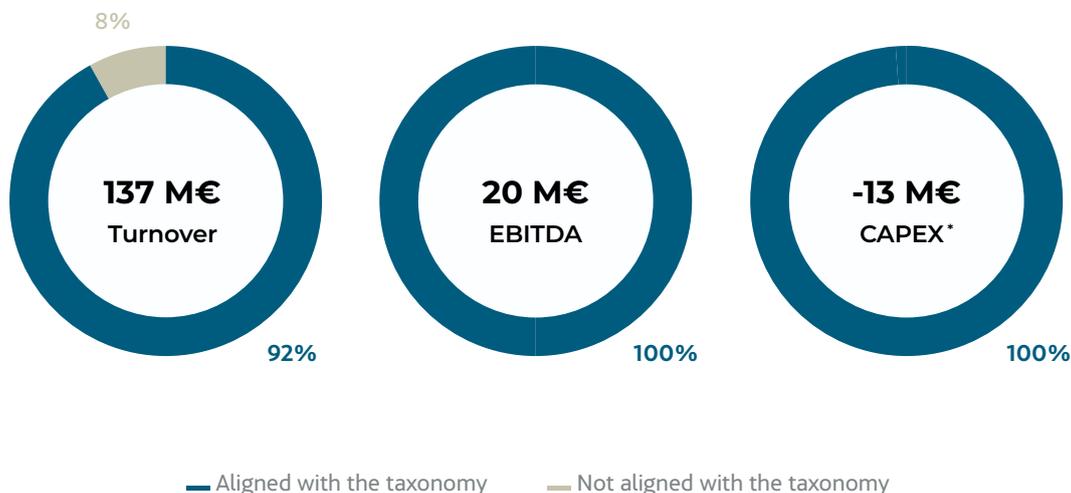
- › Population pressure and urban concentration.
- › Social inequality.

**Need for investment** in real estate solutions between 2019 and 2030 to achieve the SDGs



**525**  
billion USD / year

Key figures



\* The divested assets (-16 M€) were not aligned with the taxonomy. The investments (3 M€) are aligned, so 100% of CAPEX is taken to be aligned.

The European taxonomy is a classification tool developed by the European Commission in order to identify activities that contribute significantly to the decarbonisation of the economy. The information refers to fiscal 2019 and was independently reviewed by the company's auditor, whose report is available at <https://www.acciona.com/sustainability/sustainable-finance/>



Main taxonomy-related factors

- › A new building is aligned with European taxonomy when it meets national requirements for Near Zero Energy Buildings (NZEB) and its energy performance (EPC) is the equivalent of B or higher.



2019 Milestones

- › Development of the emblematic “Mesena” project in Madrid commenced.
- › Agreement with AXA for the turnkey development of 135 homes for rent in the Méndez Álvaro area.
- › Start of the project to build a logistics complex comprising 48 modular warehouses on 56,000 m<sup>2</sup> in Barcelona. The buildings are zoned for industrial, logistics, storage and wholesale use.
- › Phase II of PlayaMar Tres Cantos, in Playa Diamante, one of the fastest growing areas of Acapulco, went on sale. Phase I of PlayaMar is fully sold.



## Housing

With 30 years of experience in the business, ACCIONA's Real Estate area is one of Spain's leading residential developers. It has developed over 13,000 homes to date, in Spain, Portugal, Poland and Mexico.

ACCIONA is a pioneer in the development and sale of sustainable homes, which balance the needs of the user and the environment without compromising the resources and possibilities of future generations. An eco-efficient house consumes less energy and reduces CO<sub>2</sub> emissions, reduces water consumption and uses materials and construction systems that minimise the environmental impact and waste production.

The layout of ACCIONA homes meets the most demanding standards and current needs of our customers. For this reason, the company offers a broad range of common areas that contribute to maintaining a healthy lifestyle.

Backed by a solid technical and professional experience, all of the company's developments focus on sustainability to achieve one of its main objectives: contribute to preserving the environment and reducing the cost of ownership.

With **more than 30 years of experience**, ACCIONA is one of Spain's leading residential development and management companies

ACCIONA has committed to rating all its new projects in accordance with BREEAM, which certifies sustainable structures in accordance with recognised standards. It aims for all its residential projects to be rated at least "Good" under BREEAM. In 2019, the Real Estate division delivered 5 developments with the BREEAM "Good" rating (86% of the homes were rated "Very Good") and has another 11 developments under way.

Since 2013, all real estate developments have energy rating certificates and all current projects are rated A or B.

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### Outstanding projects and cases

#### Torre Lúgano, Alicante (Spain)

Location: Benidorm, Alicante (Spain). Scale: 42-storey building, 220m high, in an 8,500m<sup>2</sup> compound. 1-, 2- and 3-bedroom homes. **Strength: Homes with all amenities in one of the newest areas of the city, close to the Serra Gelada nature area. The compound has play areas, gardens, sports facilities and a gym.**



## Offices

The company develops business complexes using the highest technology and first-class materials and finishes. ACCIONA's formula when developing new office buildings is to create lasting relationships with its clients, based on a well-defined, transparent vision.



**Outstanding projects and cases**

**Albatros business park in Alcobendas (Spain)**

Location: Alcobendas, Madrid (Spain). Scale: more than 57,000 m<sup>2</sup> of offices, shopping area and an indoor parking garage with 1,000 parking spaces. **Strength: the building can be adapted to a single- or multi-tenant model. It has one of the first climate control systems with a large-scale Variable Refrigerant Volume (VRV) heat recovery system.**

**Offices for the “Mesena” development project in Madrid (Spain)**

Location: Madrid (Spain). Scale: 55,000 m<sup>2</sup> of offices, on a plot measuring over 100,000 m<sup>2</sup>. **Strength: a campus of over 10 hectares with green areas and sport facilities. The bulk of the building envelopes and installations are to be refurbished to high sustainability standards. Once completed, the campus will be LEED-certified. Focusing on the well-being of occupants and users, the buildings will also have WELL certification.**



**Hotels and tourist resorts**

ACCIONA's Real Estate business also includes the development of luxury properties, currently with several projects under way in Mexico and Spain. These hotels and resorts are an example of the Home Resort concept, which consists of offering hotel-standard services and care to clients seeking long-term stays in a safe environment.



**Outstanding projects and cases**

**Hotel Club Marítimo Sotogrande, Cádiz (Spain)**

Location: Sotogrande, Cádiz (Spain). Scale: more than 4,000 m<sup>2</sup>, for 45 rooms, common areas and commercial premises. **Strength: the building, which was recently refurbished together with an upgrade of its installations, is located alongside the marina.**



**Industrial properties**

ACCIONA develops industrial projects for sale to the end user or to an investor.



**Outstanding projects and cases**

**Calle Santander logistics complex (Barcelona)**

ACCIONA is to build a logistics complex comprising 48 modular warehouses over 56,000 m<sup>2</sup> in Barcelona. **Strength: a large-scale project zoned for industrial, logistics, storage and wholesale use.**





## OTHER SOLUTIONS



Bestinver

The structure of the population makes it necessary to **introduce citizens to long-term investment** through appropriate risk management and a highly qualified team of professionals

Through Bestinver, ACCIONA offers asset management services: mutual funds, pension funds and institutional mandates. Its approach is based on obtaining the best long-term returns by investing in equities. Bestinver has more than 30 years of experience and 6.4 billion of assets under management.

In 2019, Bestinver achieved a 23% return on the international portfolio and 21% on Bestinfond. Its investment philosophy is based on three pillars: fundamental analysis, appropriate risk management and a time horizon shared by investors and managers. This can be summarised in: knowledge, prudence and patience, which are the three watchwords guiding investment managers when offering investment services with long-term returns.

In line with these principles, Bestinver is also moving its investment fund portfolio towards ESG (environmental, social and governance) factors in line with the most demanding sustainable management principles.

The key to its success is an established reputation in the market with a unique investment philosophy, a long-term vision, proper risk management and a qualified team with extensive financial knowledge.

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ACCIONA has **over 30 years' experience** with this solution

### Key figures

<b>98 M€</b> Turnover	<b>62 M€</b> EBITDA	<b>13 M€</b> CAPEX
<b>+ 30 years</b> Experience	<b>6,790 M€</b> Under management	<b>51,705</b> Investors



### 2019 Milestones

- › Bestinver acquired securities firm Fidentiis, which provided close to 350 M€ in assets under management. The objective of this acquisition is to create Spain's largest independent investment services group.
- › In 2019, Bestinver unveiled a private section on its website where clients can trade online. The “Investing school” section of the site provides information on key concepts for investing in mutual funds and pension plans.

### Long-term returns and saving

The short- and medium-term strategy is based on developing and consolidating a platform that favours growth in the retail segment, where the bulk of savings are concentrated in Spain, and process automation to enhance client care and management in an agile, reliable way at a minimal cost. With this goal, in 2018 the company opened new offices in Spain that contribute to positioning it closer to clients. The objective is to help savers build investment portfolios that generate attractive returns, using the right asset classes depending on the period of investment: fixed-income funds for the short term, and equity funds for the long term.

- › Mutual funds: Investment opportunities with long-term returns as an alternative to the traditional savings approach based on deposits and fixed-income, which offer lower returns.
- › Pension plans: investment vehicles to channel future savings and improve the client's financial health in retirement.

### ESG investing

ACCIONA sees returns and long-term sustainability as being intertwined; as a result, Bestinver has begun to develop mutual funds that focus on environmental, social and governance (ESG) factors.

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### Grupo Bodegas Palacio 1894

This year, Grupo Bodegas Palacio 1894 **celebrated 125 years of history in the production and ageing of quality wines** in Spain's principal wine-making regions, such as Rioja, Ribera del Duero, Rueda and Toro

With over 1,215 hectares of vineyards, ACCIONA has four leading wineries: Bodegas Palacio (D.O. Ca. Rioja), Bodegas y Viñedos Viña Mayor (D. O. Ribera del Duero), Finca Caserío de Dueñas (D. O. Rueda) and Bodegas y Viñedos Anzil (D. O. Toro). The group's portfolio ranges from high-end to consumer brands.

It supplies around 6 million bottles a year in 40 markets around the world. Its customers include 50 supermarket and department store chains, 230 distributors serving the hospitality industry, 70 export customers and more than 3,000 customers in the direct sales channel. Revenues amounted to 41 M€ in 2019.

The group's distinctive values are:

- › From the vineyard to ageing, the entire process is controlled to ensure that very strict quality parameters are met consistently while respecting the environment.
- › Production of premium wines in the main Spanish designations of origin, under a commitment to excellence.
- › Commitment to innovation with a constant focus on market trends and demands. It is possible to anticipate and adapt to consumer demands through a range of brands that covers all segments of the market.
- › Creation, nurturing and growth of brands to ensure future development.

Spain's first female Master of Wine, the most prestigious international distinction in the world of wine, has been working for ACCIONA since 2018. Almudena Alberca, Technical Director of Bodegas Viña Mayor, received this prestigious professional recognition, which represents that highest level of knowledge and excellence in the field, based on her strategic vision of the business model and the ability to transmit this knowledge clearly.

The company reflects its commitment to good business practices, the environment and society in its day-to-day activities.

The group serves consumers with products that meet the highest standards of quality and safety, under a quality management system that is fully certified to the ISO 9001 standard. The group's three wineries also have food safety management systems certified to ISO 22000 and 100% of the bottles bear information on the origin of the components, and the safe use and recycling of the packaging.

The group's entire environmental management system is certified to ISO 14001 and, since 2015, all the electricity used by the wineries is from renewable sources. The group continues to take steps to reduce water and energy consumption, and to protect and conserve biodiversity. Bodegas y Viñedos Viña Mayor was the first winery in the Ribera del Duero region to obtain Wineries For Climate Protection certification, which focuses on reducing GHG emissions, improving water management, reducing waste production and improving energy efficiency.

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The group is committed to any initiative, such as Wine in Moderation, that promotes the culture of wine and its responsible consumption. Wine in Moderation is an initiative of the European wine industry to promote moderation and responsibility in wine consumption and prevent excessive or improper consumption of alcoholic beverages.

ACCIONA has a track record of over 125 years  
in this solution

Key figures



— Aligned with the taxonomy — Not aligned with the taxonomy

The European taxonomy is a classification tool developed by the European Commission in order to identify activities that contribute significantly to the decarbonisation of the economy. The information refers to fiscal 2019 and was independently reviewed by the company's auditor, whose report is available at <https://www.acciona.com/sustainability/sustainable-finance/>



Main taxonomy-related factors

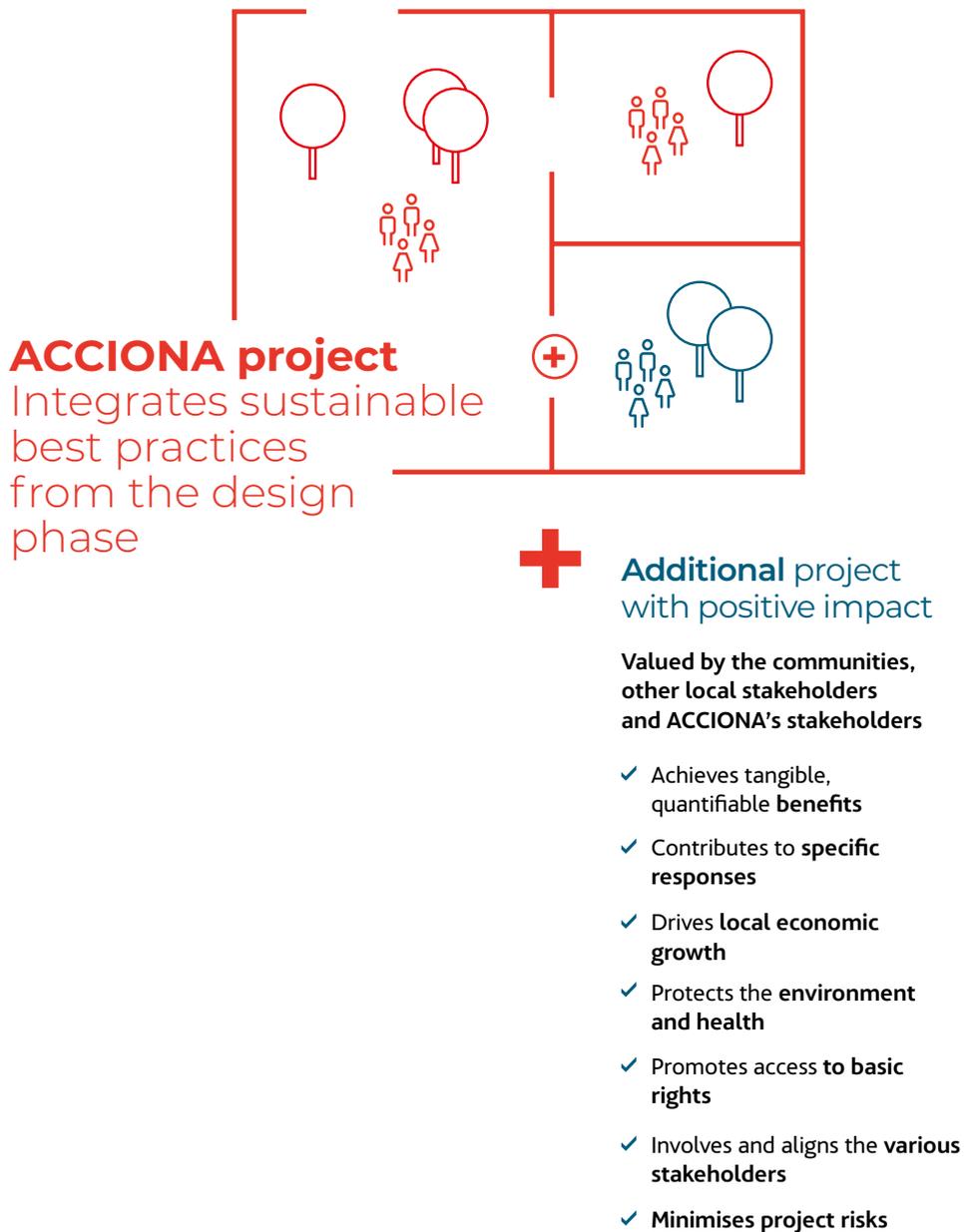
- › GHG emissions must be reduced or avoided with the necessary management practices. They must be reduced by 20% by 2030 and by 40% by 2050 with respect to 2020.
- › Carbon sequestration must be increased for at least 20 years using appropriate practices.
- › Land that was classified before 2008 as having high carbon stocks (e.g. forests) must not be tilled.



## ENHANCED IMPACT SOLUTIONS

In cooperation with its clients and financiers, ACCIONA has begun to design what it refers to as “Enhanced Impact Solutions” (EIS) as part of its integrated response to the need for a transformation towards a low-carbon economy and the achievement of the Sustainable Development Goals (SDGs), as well as to maximise the positive sustainable impact of its projects. These are business responses in which additional projects are implemented in the environs of the main project. Project capacities are leveraged to design them for a positive additional impact. These solutions are aimed at local gaps in SDG fulfilment, and contribute directly to improving living conditions, access to rights or care for ecosystems.

### Enhanced Impact Solution



## Optimising the capacity for positive transformation

These additional actions are designed to provide a service to the community that is sustainable over time, either through developing social economy companies and local entrepreneurs, or through collaborations with third parties to ensure sustained operation and maintenance.

Through these projects, ACCIONA aims to increase the transformative effect of the infrastructure in the territory by enhancing the capacity to close existing gaps and generate an additional positive impact locally, taking as reference the 169 goals of the 17 SDGs. The Enhanced Impact Solutions approach helps to channel the investment needed to achieve the SDGs towards projects that contribute to the global sustainable agenda through ACCIONA. With this proposal, the group reduces potential risks linked to project execution and the barriers to the flow of funds and local investment, while generating distinctive value for the client or creating new opportunities for local development.

The company acts directly on social gaps related to such issues as gender equality, the inclusion of disadvantaged groups, entrepreneurship, environmental issues such as the protection of natural capital, the lack of access to basic services such as water, energy or telecommunications, and other measurable, quantifiable benefits for the local population with a view to involving them in the pursuit of inclusive economic growth.

Additional projects with a positive impact respond to **local needs for progress** towards the Sustainable Development Goals

The company has implemented tools and work teams in its businesses to standardise and facilitate the development of integrated infrastructure solutions. Since 2019, ACCIONA has been working on a Solutions Catalogue of pre-defined standard additional projects.

The work teams are made up of business development professionals, the local teams from each project, the sustainability departments in the business areas, and the innovation centres. The acciona.org foundation coordinates with the work groups, contributing its experience in sustainable projects to provide basic services and infrastructure (energy, water and sanitation) to people and communities in situations of social exclusion.

Sustainable digital reporting tools, with mapping and data analysis, enable the company to get a detailed picture of the specific local needs in each additional project, and to obtain sustainability information that is relevant to the project managers.

ACCIONA is developing a network of partners with which it will collaborate actively to execute and subsequently operate additional projects; they include multilateral development banks, impact and innovation funds, NGOs, cooperation agencies, public administrations and other foundations and companies.

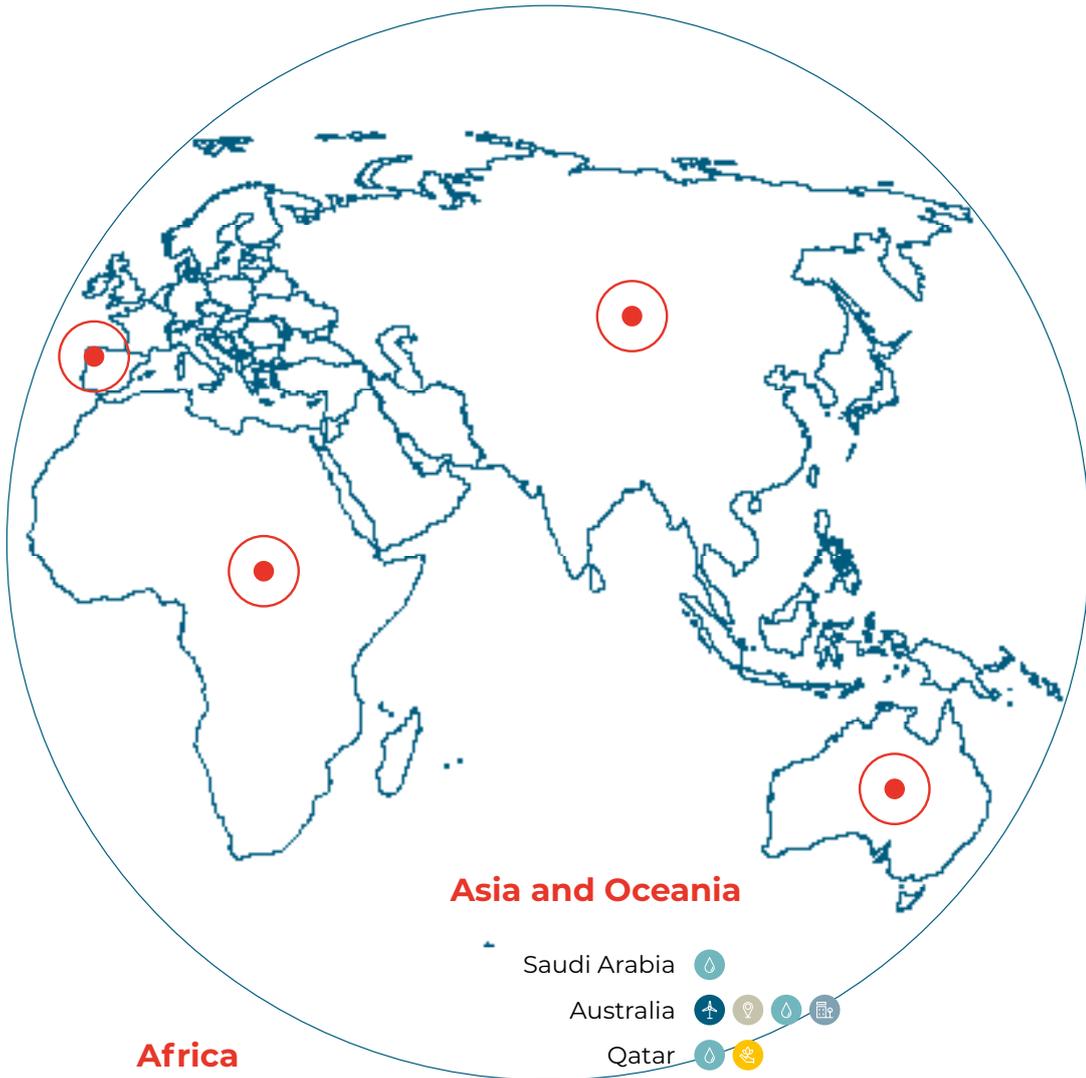
The group has developed its own impact measurement methodology, in line with the SDGs, in order to ensure the credibility and transparency that characterise it. The goal is to obtain an objective, rigorous picture of the positive impacts and to manage and mitigate any potential negative impacts throughout the entire project. The system is based on internationally recognised standards and metrics, such as: the IFC's Impact Principles, the Global Impact Investing Network (GIIN), Lean Data tools, and the Impact Management Project. The tool provides an agile but rigorous way of quantifying ACCIONA's contribution to economic growth, social progress and environmental improvement through enhanced impact solutions.

## POSITIVE IMPACT ON THE PLANET

World-changing solutions

ACCIONA operates in over 40 countries on 5 continents





- Africa**
- Algeria
  - Cape Verde
  - Egypt
  - Kenya
  - Morocco
  - South Africa
- Asia and Oceania**
- Saudi Arabia
  - Australia
  - Qatar
  - United Arab Emirates
  - The Philippines
  - Hong Kong
  - India
  - New Zealand
  - Vietnam

## SPAIN

ACCIONA has extensive experience in Spain in transport infrastructure, water, urban, social and real estate projects and in financial services. The bulk of the company's renewable electricity is generated in Spain.

### Main projects in the country



- Wind farms**
  - > Installed capacity: 4,740 MW
  - > Output: 10,639 GWh
- Scooter sharing**
  - > Services in Barcelona, Gandía, Madrid, Seville, Valencia and Zaragoza.
- Torrevieja desalination plant**
  - > EPC and O&M
  - > Population served: 1.6 million
- Hydroelectric plants**
  - > Installed capacity: 873 MW
  - > Output: 1,720 GWh
- A-23 highway, Aragón**
  - > Scale: 2.9 km tunnel
- Infanta Sofía Hospital, Madrid**
  - > End-to-end health services
  - > Energy services
- Biomass plants**
  - > Installed capacity: 61 MW
  - > Output: 421 GWh
- A-33 highway, Comunidad Valenciana**
  - > 5 viaducts
- Upkeep of historic parks, Madrid**
  - > Total 300 ha

### Socioeconomic and environmental impact in those SDGs where there are significant or major challenges



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Commitment	Context	Activity	Impact	
Improvement in air quality	Concentration of PM2.5: 21 µg/m <sup>3</sup> Hospital beds: 3 / 1,000 people Satisfaction with public transport: 65%	213 renewable facilities 5 cities with scooter sharing systems	5,031 tNOx, 9,621 tSOx and 92 tPM10 avoided	■
Decarbonisation of the electricity mix	CO <sub>2</sub> emissions: 3.9 tCO <sub>2</sub> e/capita	131 wind farms	6 M tCO <sub>2</sub> avoided	■
R&D contribution to GDP	R&D spending as a% of GDP: 1.2% Transport infrastructure quality: 3.8/5	Innovation projects 9 roads	95.7 M€ innovation spending	■

Source of SDG assessment in the country: SDG Index and Dashboards Report 2019 produced by Sustainable Development Solutions Network (SDSN) and Bertelsmann Stiftung.

### Future opportunities



- > According to the National Energy and Climate Plan, **renewable energies will account for 42% of final energy use** in 2030.<sup>12</sup>
- > **Renewable electricity generation will account for 74%** of the total by 2030.<sup>12</sup>
- > **The DSEAR Plan envisages an estimated investment of 10 B€** in 3,500 sanitation and water purification projects by 2036.<sup>13</sup>
- > **An estimated 141,390 B€ will be invested in transport infrastructure** between 2012 and 2024.<sup>14</sup>

<sup>12</sup> Ministry for Ecological Transition, Government of Spain. Energy and Climate Integrated National Plan for 2030.

<sup>13</sup> Ministry for Ecological Transition, Government of Spain. Wastewater Treatment, Sanitation, Efficiency, Savings and Reuse National Plan (DSEAR 2016-2021).

<sup>14</sup> Ministry of Development, Government of Spain. Infrastructure, Transport and Housing Plan - PITVI (2012-2024).

## AUSTRALIA

ACCIONA first entered Australia in 2002 with renewable energy assets. Since then, its portfolio has expanded and been diversified to the point that Australia is the company's second-largest market.

### Main projects in the country

- ⬆
**Mortlake South wind farms**  
 > Installed capacity: 157.5 MW
- ⬆
**Sydney Light Rail**  
 > D&C and O&M (13 years)  
 > Capacity: 450 passengers/trip
- ⬆
**Waubra wind farm, Victoria**  
 > Installed capacity: 192 MW
- ⬆
**East Rockingham waste-to-energy plant**  
 > 300,000 tons of waste/year
- ⬆
**Toowoomba Bypass, Toowoomba**  
 > D&C and O&M (25 años)
- ⬆
**Mount Gellibrand wind farm, Victoria**  
 > Installed capacity: 132 MW  
 > PPA with Viva Energy
- ⬆
**Bridge over the River Clarence, Harwood, NSW**  
 > D&C
- ⬆
**Kawana wastewater plant, Queensland**  
 > D&C and O&M  
 > Population served: 200,000 people
- ⬆
**Kingborough wastewater plant, Tasmania**  
 > Scale: increase of 8.5 M litres/day

### Socioeconomic and environmental impact in those SDGs where there are significant or major challenges

Commitment	Context	Activity	Impact	□
Improvement in air quality	CO <sub>2</sub> emissions: 15 tCO <sub>2</sub> e/capita	3 wind farms	1.1 M tCO <sub>2</sub> avoided	■
Decarbonisation of the electricity mix	Renewable energy: 9%	3 wind farms Waste-to-energy plant in Kwinana	1,234 GWh renewable	■
R&D contribution to GDP	R&D spending as a% of GDP: 1.9% Transport infrastructure quality: 4.0/5	Innovation projects Two roads Sydney Light Rail	0.6 M€ innovation spending	■

Source of SDG assessment in the country: SDG Index and Dashboards Report 2019 produced by Sustainable Development Solutions Network (SDSN) and Bertelsmann Stiftung.

### Future opportunities



- > The national climate strategy aims to **reduce the economy's emission intensity 64-65%** between 2005 and 2030. <sup>15</sup>
- > Australia's 2019-2020 Budget presents an **investment of 100 B AUD in transportation infrastructure.** <sup>16</sup>
- > **Water demand in the country's six largest cities is estimated to grow by 39% by 2026 and 64% by 2056.** <sup>17</sup>

<sup>15</sup> Australian Government. Australia's 2030 Climate Change targets.

<sup>16</sup> Commonwealth of Australia. Budget 2019-2020, Investing in our community Congestion busting infrastructure now and for the future.

<sup>17</sup> Australian Government. Australia Infrastructure Audit 2019. Water.

## CANADA

ACCIONA has been operating in Canada since 2000. It is currently working on energy solutions such as hydroelectric projects, and other water and transportation solutions.

### Main projects in the country



- Site C hydroelectric complex**

> Installed capacity: 1,100 MW
- Saint John DWTP, New Brunswick**

> Population served: 70,000
- Victoria International Airport**

> Cleaning services
- South Canoe wind farm**

> Installed capacity: 102 MW
- Pattullo bridge, British Columbia**
- North Shore WWTP, Vancouver**

> Population served: +200,000

### Socioeconomic and environmental impact in those SDGs where there are significant or major challenges



Commitment	Context	Activity	Impact	□
Access to sanitation	Access to safe sanitation: 77%	North Shore WWTP Saint John DWTP	270,000 people served	■
Improvement in air quality	Renewable energy: 9%	4 wind farms	0.35 M tCO <sub>2</sub> avoided	■

Source of SDG assessment in the country: SDG Index and Dashboards Report 2019 produced by Sustainable Development Solutions Network (SDSN) and Bertelsmann Stiftung.

### Future opportunities



- > The Business Council of Canada estimates an **infrastructure shortfall of between 150 billion and 1 trillion dollars**.<sup>18</sup>
- > According to its Nationally Determined Contribution (NDC) under the Paris Agreement, Canada aims to **reduce its emissions by 30% by 2030** with respect to 2005.<sup>19</sup>
- > As part of the Climate Action Plan, Canada intends to **invest 28.7 B CAD in sustainable mobility by 2030**.<sup>20</sup>

<sup>18</sup> ICEX, España Exportación e Inversiones. Canada's transportation infrastructure market.

<sup>19</sup> Canada's 2017 Nationally Determined Contribution Submission.

<sup>20</sup> Government of Canada. Canada's Plan for Climate Change and Clean Growth.

## CHILE

Since 1993, ACCIONA has had a strategic presence in Chile, providing public and private solutions in clean energy, water, transportation and social infrastructure. Chile is also the company's base for all of South America.

### Main projects in the country

-  **Usya photovoltaic plant**  
 › Installed capacity: 64 MWp
-  **San Gabriel wind farm**  
 › Installed capacity: 183 MW
-  **Punta Palmeras wind farm, Coquimbo**  
 › Installed capacity: 45 MW
-  **El Romero Solar photovoltaic plant**  
 › Installed capacity: 246 MWp  
 › PPA with Google
-  **Almeyda photovoltaic plant**  
 › Installed capacity: 62 MWp
-  **Copiapó desalination plant**  
 › O&M (20 años)  
 › Capacity: 54,000 m<sup>3</sup>/day
-  **Santiago de Chile and 10 other airports**  
 › Airport services
-  **Tolpán wind farm**  
 › Installed capacity: 87 MW
-  **Marga Marga Hospital, Valparaíso**  
 › D&C  
 › Serving: 500,000 people

### Socioeconomic and environmental impact in those SDGs where there are significant or major challenges



Commitment	Context	Activity	Impact	
Contribution to health	Hospital beds: 2.2 / 1,000 people	2 hospitals	More than 300 hospital beds	■
Improvement in air quality	CO <sub>2</sub> emissions: 4.8 tCO <sub>2</sub> e/capita	2 wind farms El Romero solar plant	0.57 M tCO <sub>2</sub> avoided	■

Source of SDG assessment in the country: SDG Index and Dashboards Report 2019 produced by Sustainable Development Solutions Network (SDSN) and Bertelsmann Stiftung.

### Future opportunities



- › The country's Energy Policy establishes that **renewable energies must account for 60% by 2035**.<sup>21</sup>
- › This Policy includes **cutting GHG emission intensity by at least 30% by 2030**.<sup>21</sup>
- › The estimated investment in **water infrastructure through 2025 is 1.169 B USD**.<sup>22</sup>
- › The Infrastructure Master Plan estimates **15.92 B USD of investment in more than 750 infrastructure projects between 2010 and 2025**.<sup>23</sup>

<sup>21</sup> Ministry of Energy, Government of Chile. Energy 2050, Chile's Energy Policy.  
<sup>22</sup> ICEX, España exportación e inversiones. Chile's water treatment market.  
<sup>23</sup> Ministry of Public Works, Government of Chile. Infrastructure Master Plan 2010-2025.

## GULF COOPERATION COUNCIL

ACCIONA has projects in the United Arab Emirates, Saudi Arabia, Oman and Qatar. The solutions include water desalination, transportation, event organisation, and clean energy EPCs.

### Main projects in the country



-  **Dubai Metro, United Arab Emirates**  
 > D&C  
 > Length: 15 km
-  **Ras Abu Fontas 3 desalination plant, Qatar**  
 > EPC and O&M  
 > Capacity: 164,000 m<sup>3</sup>/day
-  **National Museum of Qatar, Doha, Qatar**
-  **Expo 2020 Dubai, United Arab Emirates**  
 > Pavilions: +50 countries
-  **Facility D desalination plant Qatar**  
 > EPC and O&M  
 > Capacity: 284,000 m<sup>3</sup>/day
-  **Fujairah desalination plant, United Arab Emirates**  
 > EPC and O&M  
 > Capacity: 137,000 m<sup>3</sup>/day
-  **Shuqaiq 3 desalination plant, Saudi Arabia**  
 > Capacity: 450,000 m<sup>3</sup>/day
-  **Al Khobar desalination plant, Saudi Arabia**  
 > EPC  
 > Capacity: 210,000 m<sup>3</sup>/day
-  **Mohammed Bin Rashid Al Maktoum solar farm, United Arab Emirates**  
 > Installed capacity: 1,054 MWp

### Socioeconomic and environmental impact in those SDGs where there are significant or major challenges



Commitment	Context	Activity	Impact	□
Improved access to water	Water capture ratio: 472-2,347%	3 desalination plants in operation	3.4 M people served	■
114 R&D contribution to GDP	R&D spending as a% of GDP: 0.5 - 1.0% Transport infrastructure quality: 3-4 (over 5)	Innovation projects Dubai Metro, UAE	7.6 M€ innovation spending	■

Source of SDG assessment in the country: SDG Index and Dashboards Report 2019 produced by Sustainable Development Solutions Network (SDSN) and Bertelsmann Stiftung.

### Future opportunities



- > The United Arab Emirates National Plan aims to **obtain 44% of total energy** from renewable sources. <sup>24</sup>
- > The Qatar Ministry of Energy and Industry announced a **125 B USD investment programme for renewable energy**. <sup>25</sup>
- > The UAE aims to **reduce water demand by 21%** by 2030, using 100% recycled water. <sup>26</sup>

<sup>24</sup> The Official Portal of the UAE Government. UAE Energy Strategy 2050 and The UAE Water Security Strategy 2036.

<sup>25</sup> IRENA. Renewable Energy Market Analysis: GCC 2019.

<sup>26</sup> The Official Portal of the UAE Government. UAE Energy Strategy 2050 and The UAE Water Security Strategy 2036.

## USA

The US market represents one of the greatest opportunities for investment in wind power. ACCIONA also has solar thermal solutions in operation there.

### Main projects in the country

-  **Chalupa wind farm**  
 > Installed capacity: 198 MW
-  **Red Hills wind farm, Oklahoma**  
 > Installed capacity: 123 MW
-  **Tatanka wind farm, North and South Dakota**  
 > Installed capacity: 180 MW
-  **EcoGrove wind farm, Illinois**  
 > Installed capacity: 100.5 MW
-  **Palmas Altas wind farm**  
 > Installed capacity: 145 MW
-  **Portfolio of photovoltaic projects acquired from Tenaska**  
 > Installed capacity: 3,000 MW
-  **Dempsey Ridge wind farm, Oklahoma**  
 > Installed capacity: 132 MW
-  **Nevada Solar One solar thermal plant**  
 > Installed capacity: 64 MW

### Socioeconomic and environmental impact in those SDGs where there are significant or major challenges

Commitment	Context	Activity	Impact	□
Decarbonisation of the electricity mix	Renewable energy: 9%	7 wind farms Nevada Solar One solar thermal plant	2,284 GWh renewable	■
Improvement in air quality	CO <sub>2</sub> emissions: 16 tCO <sub>2</sub> e/capita	7 wind farms Nevada Solar One solar thermal plant	1.46 M tCO <sub>2</sub> avoided	■

Source of SDG assessment in the country: SDG Index and Dashboards Report 2019 produced by Sustainable Development Solutions Network (SDSN) and Bertelsmann Stiftung.

### Future opportunities



- > Over 200 cities have the **goal of achieving 100% renewable energy** by 2035.<sup>27</sup>
- > According to the International Renewable Energy Agency, **wind energy capacity in the United States will multiply five-fold** between 2014 and 2030.<sup>28</sup>
- > It is estimated that **1 trillion in investment will be needed to expand services to meet domestic water demand** in the next 25 years.<sup>29</sup>

<sup>27</sup> Deloitte. 2019 renewable energy industry outlook.  
<sup>28</sup> IRENA, REMap 2030, A Renewable Energy Map United States of America, 2015.  
<sup>29</sup> Asce. Infrastructure Report Card 2017.

## MEXICO

ACCIONA has been operating in Mexico since 1978, providing renewable energy, water, transport and real estate solutions.

### Main projects in the country



-  **Oaxaca II-III-IV wind complex**  
 > Installed capacity: 306 MW
-  **Puerto Libertad photovoltaic plant**  
 > Installed capacity: 405 MWp
-  **Polytechnic University of San Luis Potosí**  
 > End-to-end services concession
-  **Parque Reforma, Mexico City and Acapulco**  
 > Homes: >2,000 built
-  **cd. Obregon-Guaymas road**  
 > Length: 30 km approx.
-  **Eurus wind farm, Oaxaca**  
 > Installed capacity: 250 MW  
 > PPA with CEMEX
-  **El Cortijo wind farm, Tamaulipas**  
 > Installed capacity: 183 MW
-  **End-to-end water system in Boca del Río**  
 > Population served: 150,000 people  
 > Duration: 30 year
-  **Automobile manufacturers, Puebla**  
 > Facility Services

### Socioeconomic and environmental impact in those SDGs where there are significant or major challenges



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Commitment	Context	Activity	Impact	
Improved water quality and access	Access to safe drinking water: 43% Access to safe sanitation: 45% Water capture ratio: 26%	End-to-end water management in Boca del Río	+10.5 M people served	<input type="checkbox"/>
Decarbonisation of the electricity mix	Renewable energy: 9%	5 wind farms	2,864 GWh renewable	<input type="checkbox"/>
R&D contribution to GDP	R&D spending as a% of GDP: 0.5% Transport infrastructure quality: 2.8/5	Innovation projects 2 roads	66.8 M€ innovation spending	<input type="checkbox"/>
Improvement in air quality	Concentration of PM2.5: 21 µg/m <sup>3</sup>	5 wind farms	1,039 tNOx, 1,453 tSOx and 20.1 tPM10 avoided	<input type="checkbox"/>
Pollution avoided	CO <sub>2</sub> emissions: 3.9 tCO <sub>2</sub> e/capita	5 wind farms	1.66 M tCO <sub>2</sub> avoided	<input type="checkbox"/>

Source of SDG assessment in the country: SDG Index and Dashboards Report 2019 produced by Sustainable Development Solutions Network (SDSN) and Bertelsmann Stiftung.

### Future opportunities



- > The Energy Transition Strategy sets a **target of 50% clean energy** by 2050.<sup>30</sup>
- > The Strategy aims to **reduce energy intensity by 2.9%** by 2050.<sup>30</sup>
- > It is estimated that **pressure on water resources will increase 2.9%** at national level by 2030.<sup>31</sup>
- > According to the National Programme, a total of **1.27 B€** will be invested in transport infrastructure by 2024.<sup>32</sup>

<sup>30</sup> SENER, Energy Secretary. Renewable Energy Prospective 2016-2030.  
<sup>31</sup> Water National Commission. Water Statistics in Mexico.  
<sup>32</sup> Mexican Government. Road Infrastructure National Program 2018-2024.

Summary of the impact by country or region



Country or region	Improvements	Activity	Impact	
Spain	› Improvement in air quality	› 213 renewable facilities	› 5,031 tNOx, 9621 tSOx and 92 tPM10 avoided	■
	› Decarbonisation of the electricity mix	› 5 cities with scooter sharing systems	› 6 M tCO <sub>2</sub> avoided	■
	› R&D contribution to GDP	› Innovation projects 9 roads	› 95.7 M€ innovation spending	■
Australia	› Improvement in air quality	› 3 wind farms	› 1.1 M tCO <sub>2</sub> avoided	■
	› Decarbonisation of the electricity mix	› Waste-to-energy in Kwinana	› 1,234 GWh renewable	■
	› R&D contribution to GDP	› Innovation projects › Two roads › Sydney Light Rail	› 0.6 M€ innovation spending	■
Canada	› Access to sanitation	› North Shore wastewater treatment plant	› 270,000 people served	■
	› Improvement in air quality	› Saint John drinking water treatment plantfarms › 4 wind	› 0.35 M tCO <sub>2</sub> avoided	■
Chile	› Contribution to health	› 2 hospitals	› Over 300 hospital beds	■
	› Improvement in air quality	› 2 wind farms › El Romero solar plant	› 0.57 M tCO <sub>2</sub> avoided	■
Gulf Cooperation Council	› Access to clean water	› 3 desalination plants in operation	› 3.4 M people served	■
	› Contribución I+D al PIB	› Innovation projects Dubai Metro, UAE	› 7.6 M€ innovation spending	■
USA	› Decarbonisation of the electricity mix	› 7 wind farms	› 2,284 GWh renewable	■
	› Improvement in air quality	› Nevada Solar One solar thermal plant	› 1.46 M tCO <sub>2</sub> avoided	■
Mexico	› Improvement in water access and quality	› End-to-end water management in Boca del Río	› +10.5 M people served	■
	› Decarbonisation of the electricity mix	› 5 wind farms	› 2,864 GWh renewable	■
	› R&D contribution to GDP	› Innovation projects	› 66.8 M€ innovation spending	■
	› Improvement in air quality	› 2 roads	› 1,039 tNOx, 1,453 tSOx and 20.1 tPM10 avoided	■
	› Pollution avoided		› 1.66 M tCO <sub>2</sub> avoided	■
				■

# The value of doing things right

## Effective, strategic, customised governance

Effective, strategic, customised governance **118**

Exemplary conduct under a compliance framework **138**

Integrated focus on risk control and management **140**

Diverse talent with expertise in designing a better planet **144**

Innovation to lead the change **148**

Leading the way to a sustainable, decarbonised economy **152**

### Corporate governance

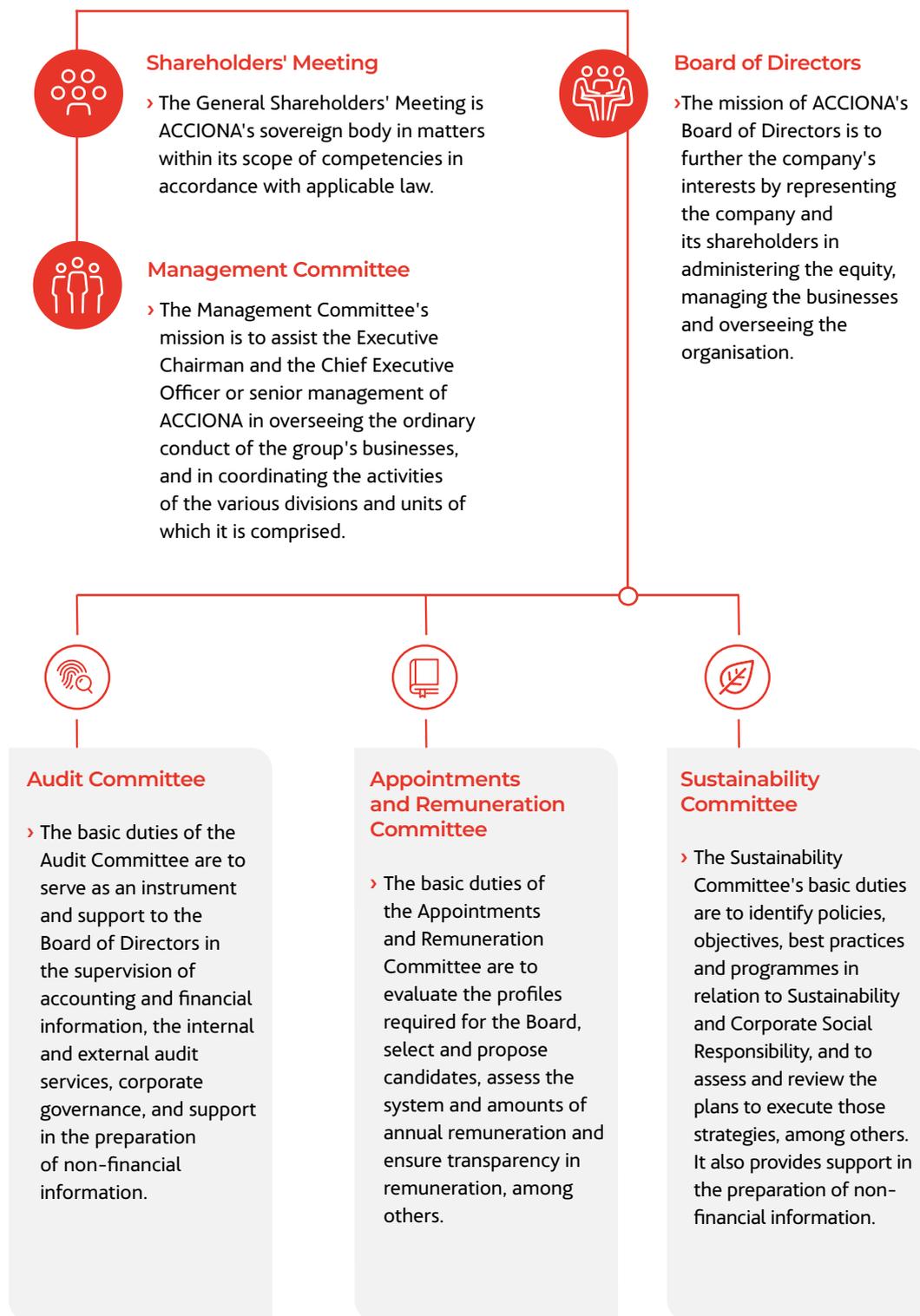
**118**

ACCIONA's governing bodies are committed to continuous improvement, striving for effective, transparent and rigorous management of all the company's businesses and operations. Corporate governance practices at ACCIONA help generate value and safeguard the long-term interests of the company, its shareholders and other stakeholders.

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## ASSURANCE OF GOOD GOVERNANCE

### ACCIONA's governance structure



ACCIONA is guided by the Unified Good Governance Code of Listed Companies drafted by the Spanish National Securities Market Commission (CNMV), and by national and international best practices in corporate governance. The company periodically reviews its regulations as part of its efforts to align and incorporate these indications and best practices into its regulatory frameworks.

## External regulatory framework

- › Capital Companies Act
- › CNMV Good Governance Code of Listed Companies.
- › CNMV Technical Guide 3/2017 on audit committees at public-interest entities.
- › CNMV Technical Guide 1/2019: On nomination and remuneration committees at public-interest entities.

## Internal regulatory framework

- › Articles of Association.
- › Shareholders' Meeting Regulation.
- › Board of Directors Regulation.
- › Code of Conduct.
- › Internal Code of Conduct in connection with the securities markets.
- › Policy Book.<sup>33</sup>

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+ More information on the Policy Book at <https://www.acciona.com/shareholders-investors/corporate-governance/corporate-policies-book/>

**ACCIONA is fully compliant with 93% and partially compliant with 5%**

of the recommendations in the **Good Governance Code of Listed Companies** that apply to it

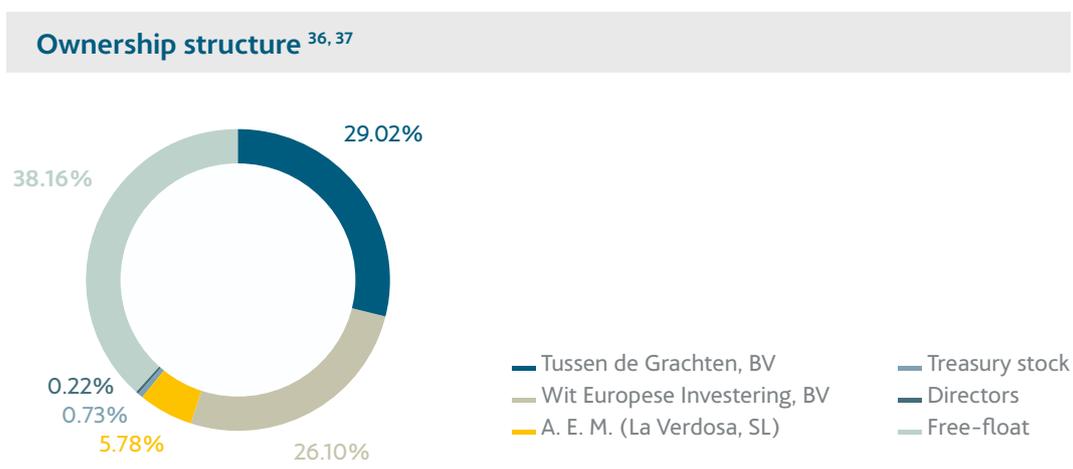
<sup>33</sup> Sustainability Policy; Stakeholder Relations Policy; Innovation Policy; Anti-Corruption Policy; Crime Prevention and Anti-Bribery Policy; Antitrust Policy; Risk Management and Control Policy; Quality Policy; Human Rights Policy; Human Resources and Occupational Health and Safety Policy; Social Action Policy; Environmental Policy; Biodiversity Policy; Climate Change Policy; Water Policy; Policy on Communication and Contact with Shareholders and Investors; Director Selection Policy; Policy on the Remuneration of Directors of ACCIONA, S.A.; and Personal Data Protection Policy and Guarantee of Digital Rights at ACCIONA.

ACCIONA is fully compliant with 93% and partially compliant with 5% of the recommendations of the Good Governance Code of Listed Companies that are applicable to it <sup>34</sup>, the only recommendation it has not applied is the separation of the Appointments and Remuneration Committee into two separate committees <sup>35</sup>.

+ More information in the 2019 Annual Corporate Governance Report at <https://mediacdn.acciona.com/media/3544930/acciona-annual-corporate-governance-report-2019.pdf>

## OWNERSHIP STRUCTURE

As of 31 December 2019, the parent company's share capital was represented by 54,856,653 fully subscribed and paid ordinary uncertificated shares, each with a par value of 1 euro, together amounting to a market capital of 5,178 billion euros.



Changes in the ownership structure as compared to the previous year are due to the reduction in share capital by 2,402,897 euros by means of the buyback of 2,402,897 own shares executed by the Board of Directors on 28 March 2019 as part of the Share Buyback Programme and as provided by the delegation of powers granted by shareholders at their 2018 General Meeting.

## SHAREHOLDERS' MEETING

All shares enjoy the same rights. The Company's Articles of Association do not establish any kind of restriction or maximum limit on the voting rights that a shareholder may exercise. Neither are there obstacles in the law or the Articles of Association to the acquisition or transmission of shares, without prejudice to the pre-emptive acquisition rights that some of the company's declared core shareholders have granted each other.

<sup>34</sup> Four of the 64 recommendations of the CNMV's Good Governance Code of Listed Companies do not apply to ACCIONA.  
<sup>35</sup> At present, ACCIONA does not consider it necessary to create two independent committees, among other reasons because it would unnecessarily increase the Board of Directors' expense. Likewise, the size and current composition of the Board of Directors would result in overlapping membership of the two committees. Nevertheless the company's Articles of Association do allow for this possibility, and two separate committees may be created in the future if the circumstances warrant this.  
<sup>36</sup> On the date of writing this report.  
<sup>37</sup> On 24 January 2020, IVESCO, LTD. notified the company that it had attained a significant stake in ACCIONA, S.A. (1.013%).

In 2011, ACCIONA set up an electronic forum to ensure and facilitate communication with all shareholders, including minority interests, prior to the General Meeting of Shareholders, in accordance with the provisions of the Capital Companies Act. Proposals for a supplement to the notice of Meeting may be published in this forum, as well as requests for support for such proposals, initiatives to achieve the percentage necessary to exercise minority rights allowed by law, and offers and solicitations of proxies.

Furthermore, when the Meeting is called, ACCIONA makes available to shareholders, via its website, a remote online or postal voting system in order to help them exercise their right to vote.



**84.8%**  
attended the 2019  
of share capital



All the motions before the 2019  
Shareholders' Meeting were passed by at

**84.5%**  
of the capital in attendance

## The main topics discussed at the 2019 General Meeting of Shareholders

- › Examination and approval of the 2018 financial statements.
- › Examination and approval of the 2018 Directors' Report.
- › Examination and approval of the 2018 Non-Financial Information Statement.
- › Examination and approval of the 2018 Sustainability Report.
- › Approval of a gross dividend of €3.5 per share, paid in July 2019.
- › Appointment of a new (female) independent director.
- › Approval, on an advisory basis, of the Annual Report on Director Remuneration for 2018.

ACCIONA also has permanent channels for communication with shareholders, analysts and investors by means of its Investor Relations Department. The aim of this department is to resolve queries and increase knowledge of ACCIONA, its strategies and potential sources of value creation. More than 350 contacts with investors and analysts took place in the year, including participation in conferences and the organisation of roadshows and specific presentations on certain matters. These meetings created or strengthened stable, long-term relationships with a broad range of investors and analysts.

Specifically, over the course of the year, the Investor Relations Department held meetings and contacts with a total of 377 investors, notably including:

- › 16 conferences (5 in Madrid, 5 in London, 3 in New York, 1 in Paris, 1 in Bilbao, 1 in Porto).
- › 11 roadshows in various cities and countries: Madrid, Barcelona, Paris, London, Frankfurt, Milan, Belgium, the Netherlands, Switzerland.
- › 5 ESG events in Madrid, London and Paris.
- › 4 earnings presentations.
- › 7 events with analysts and investors: 3 visits to the Pamplona facilities, a breakfast meeting to discuss the Property Development business with analysts, 2 meetings between analysts and investors and the company's management team, and the presentation of the Nordex capital increase subscription.
- › Working meetings with, and presentations to, core shareholders.

## BOARD OF DIRECTORS

### Board of Directors composition

The composition of ACCIONA's Board of Directors and its Committees is based on the principles of transparency and independence, guided by criteria of complementarity, professionalism and diversity. ACCIONA's Director Selection Policy ensures that the proposed appointments or re-appointments of directors are based on a prior analysis of the Board's needs. The Appointments and Remuneration Committee reviews compliance with this policy each year. In 2019, it concluded that the composition of the governing body responds to the diversity required to adequately discharge its supervisory duties.

The company's Board of Directors is composed of eleven members, with a diversity of know-how, skills, origins, experience, nationalities and gender, ensuring the appropriate representation of all the shareholders and the body's effective performance. 64% of the Board's directors are independent, including a Lead Independent Director. Moreover, all the Committees are comprised entirely of non-executive directors, in accordance with the provisions of the Board of Directors Regulation. The Audit Committee and the Appointments and Remuneration Committee are formed solely of independent directors

With regard to gender diversity, there are three women on the Board, representing 27.3% of the total. The Appointments and Remuneration Committee has been promoting the incorporation of women directors for some time, with the aim of their accounting for 30% of the total in 2020. Furthermore, modifications were approved to the Director Selection Policy in 2019 to include age and disabilities as new diversity criteria.

 **More information** on the director selection process at <https://www.acciona.com/shareholders-investors/corporate-governance/corporate-policies-book/>

## Board of Directors



### POSITION

**7 out of 11**

independent directors

**64%**

**2 out of 11**

external proprietary directors

**18%**

**2 out of 11**

executive directors

**18%**



### GENDER DIVERSITY AND LENGTH OF SERVICE



**3 out of 11**

female directors

**27%**



**7.8 years**

average length of service



### DIVERSITY OF KNOW-HOW AND EXPERIENCE

**1 out of 11**

in energy

**9%**

**4 out of 11**

in infrastructure

**36%**

**8 out of 11**

in finance / accountancy

**73%**

**11 out of 11**

in internationalisation

**100%**

**3 out of 11**

in IBEX

**27%**

**2 out of 11**

in marketing

**18%**

**10 out of 11**

in business management

**91%**

**7 out of 11**

in sustainability

**64%**

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### EFFECTIVENESS OF THE BOARD OF DIRECTORS



**93.6%**

attendance



**10** meetings

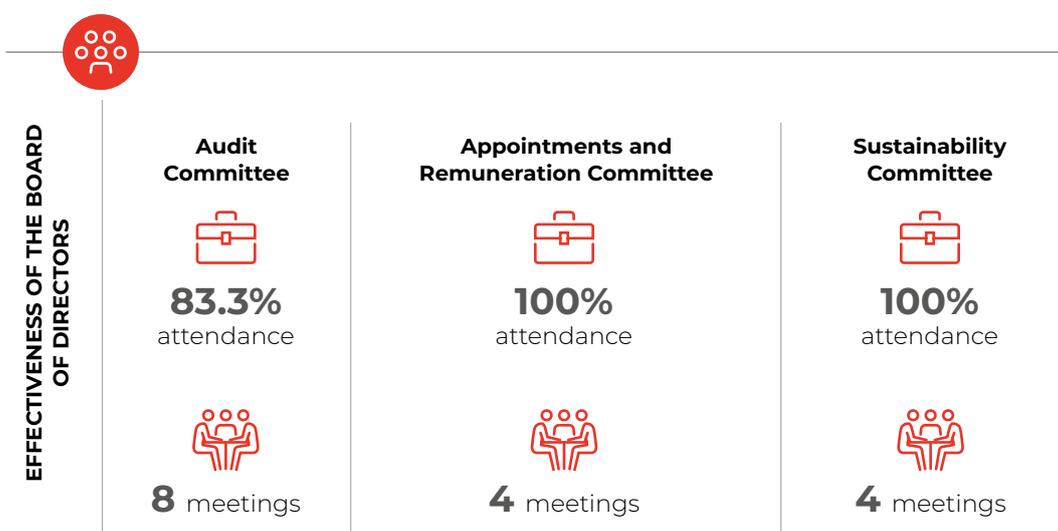


### DIRECTORS' TERM



**3 years**

is the maximum term as a director, and directors may be re-appointed one or more times in accordance with the Articles of Association

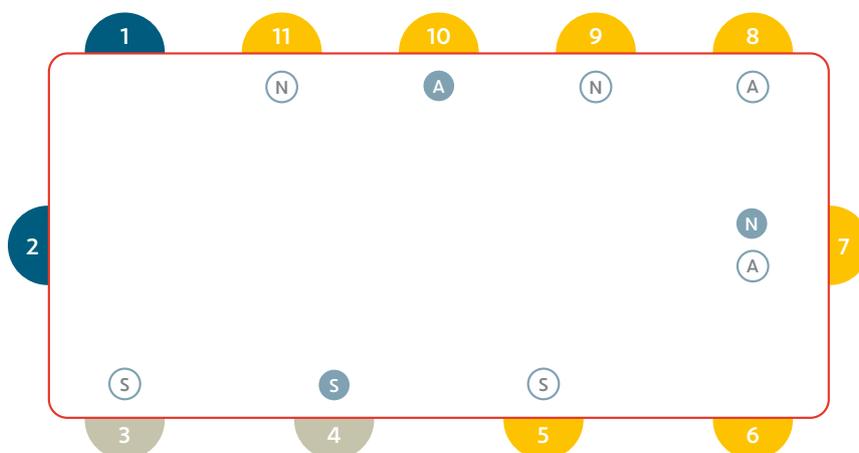


**All the Committees are formed solely of non-executive directors**

The Audit Committee and the Appointments and Remuneration Committee are formed **solely of independent directors**

I The value of doing **things right**

– Effective, strategic, customised governance



- |   |  |   |   |
|---|--|---|---|
| <p>1.<br/>› Executive Vice-Chairman<br/>› Mr. Juan Ignacio Entrecanales Franco<br/>› 22 years</p> | <p>2.<br/>› Executive Chairman<br/>› Mr. José Manuel Entrecanales Domecq<br/>› 22 years</p>    | <p>3.<br/>› Proprietary director<br/>› Mr. Javier Entrecanales Franco<br/>› 8 years</p>           | <p>4.<br/>› Proprietary director<br/>› Mr. Daniel Entrecanales Domecq<br/>› 10 years</p>      |
| <p>5.<br/>› Independent director<br/>› Mr. José María Pacheco Guardiola<br/>› 1 year</p>          | <p>6.<br/>› Independent director<br/>› Ms. Sonia Dulá<sup>38</sup><br/>› 0 years</p>           | <p>7.<br/>› Lead independent director<br/>› Mr. Juan Carlos Garay Ibargaray<br/>› 6 years</p>     | <p>8.<br/>› Independent director<br/>› Ms.. Karen Christiana Figueres Olsen<br/>› 2 years</p> |
| <p>9.<br/>› Independent director<br/>› Mr. Jerónimo Marcos Gerard Rivero<br/>› 5 years</p>        | <p>10.<br/>› Independent director<br/>› Ms. Ana Inés Sainz de Vicuña Bemberg<br/>› 4 years</p> | <p>11.<br/>› Independent director<br/>› Mr. Javier Sendagorta Gómez del Campillo<br/>› 1 year</p> |   |

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Legend

- › Position
- › Full name
- › Number of years as a director of ACCIONA

- (A) Audit Committee
- (N) Appointments and Remuneration Committee
- (S) Sustainability Committee
- Committee Chairperson
- Committee member

- Executive directors
- Proprietary directors
- Independent directors

+ **More information** in the 2019 Annual Corporate Governance Report at <https://www.acciona.com/shareholders-investors/corporate-governance/corporate-governance-report/> and the 2019 Annual Report on Remuneration at <https://www.acciona.com/shareholders-investors/corporate-governance/annual-report-remuneration-directors-listed-companies/>

<sup>38</sup> Ms. Sonia Dulá has been a member of ACCIONA's Board of Directors since her appointment was approved by the shareholders at the General Meeting on 30 May 2019.

Mr. Jorge Vega-Penichet López has been Secretary (non-Director) of the Board of Directors since 2006.

## Effectiveness of the Board of Directors and its Committees

At Board of Directors meetings, directors are encouraged to participate actively in the debate, with full respect for freedom of opinion and criteria. This ensures an effective process for the adoption of decisions by consensus, based on the experience of each Board member. The Board issued a positive evaluation of the Chairman's ability to foster and moderate dialogue in which all critical opinions are heard and considered. The various aspects of the Board's functioning are also considered adequate, such as the time devoted to discussion, quality of information, depth of analysis, internal and external advice, cross-checking of information and form of adopting resolutions.

Breakdown of the Board's duties and approximate time devoted to each in 2019:

- › Management of the business: 40%.
- › General policies and strategies: 15%.
- › Risk management: 18%.
- › Review of financial and non-financial information (internal and external audit): 27%.

Each director dedicated an average of 110 hours to meetings of the Board of Directors. In addition, members of the Audit Committee each dedicated an average of 64 hours to the Committee's meetings. Members of the Appointments and Remuneration Committee and the Sustainability Committee each dedicated an average of 32 and 24 hours, respectively.

The Board of Directors Regulation establishes that a director may not belong to more than three Boards of Directors of listed companies, including ACCIONA. Moreover, the Board may, on the basis of a prior report by the Appointments and Remuneration Committee, set a lower number if it considers that the dedication required by the other Boards prevents members from devoting the necessary time to their duties as members of the Board of Directors of ACCIONA.

Communication between members of the Board and the group's executives is direct and fluid. The executives report regularly on company performance, risks and opportunities, corporate transactions and progress with meeting objectives. Accordingly, the Board of Directors is actively involved in defining the strategy and in supervising its implementation, as well as in monitoring financial and non-financial risks.

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In 2019, the Board of Directors held two closed-door meetings with external auditors, which were not attended by the management team.

In accordance with the provisions of the Board of Directors Regulation, executives of ACCIONA and its subsidiaries take part in Board of Directors meetings when, in the Chairman's judgement, it is necessary or advisable to present certain matters for their consideration. Over the course of 2019, the CEOs of the various divisions (Energy, Infrastructure and Other Activities) reported on several occasions: the Chief Financial Officer attended five times, always prior to the referral and publication of the periodic financial information; the Corporate Controller attended three times; the Head of Markets and Investor Relations attended twice; and the Heads of Services and Energy Development each attended once.

Meetings of ACCIONA's Board of Directors or of any of its committees commence with approval of the minutes of the previous meeting and presentation of reports by the Committee chairpersons. Subsequently, discussions take place concerning the significant matters presented and the pertinent decisions are taken. Once per quarter, the Board undertakes an in-depth review of the degree to which the objectives for the year are being achieved.

## Main actions by the Board of Directors in 2019

Notwithstanding the supervisory and control powers that correspond solely to the Board of Directors, the latter conducted the following actions during the year:

- › At the meetings reports were given by the Chairpersons of the various Committees concerning each of the meetings held and the minutes were approved.
- › It reviewed the variable remuneration to directors in 2018, on the basis of the report and proposal of the Appointments and Remuneration Committee.
- › On the basis of the favourable report by the Appointments and Remuneration Committee, it approved the modification of remuneration for members of the Board of Directors, Committees and officers.
- › It authorised the delivery of shares to the management team pursuant to the Share and Performance Share Delivery Plan and the Plan to Replace Variable Remuneration with Shares, on the basis of the proposal by the Appointments and Remuneration Committee. Moreover, it approved the delivery of shares to employees who had signed up to the Employee Share Ownership Plan.
- › The Board of Directors executed the agreement to reduce ACCIONA, S.A.'s share capital by 2,402,897 shares after completion of the Share Buyback Programme.
- › It accepted the proposals to be presented to the Ordinary General Meeting of Shareholders, including the distribution of the dividend in the amount of €3.50 gross per share and approval of the Sustainability Report. It also proposed director appointments and re-appointments, as well as appointments to the various Committees.
- › The Board of Directors approved the replacement of Mr. Juan Carlos Garay as Chairperson of the Audit Committee, after a term of four years, by the independent director Ms. Ana Sainz de Vicuña.
- › It periodically monitored the issues raised by the shareholders at their Ordinary General Meeting.
- › It acknowledged the reports of ACCIONA's Head of Taxation concerning tax matters and was apprised of the updates to the Risk Map to adapt it to the group's new structure.
- › It ratified the renewal of the Euro Medium Term Note Programme (EMTN) and the Euro Commercial Paper Programme (ECP).
- › The Board of Directors approved a tender offer for 100% of the shares of Nordex, SE at a price of €10.34 per share, after subscribing to the capital increase executed in October, in which ACCIONA, S.A.'s stake in the share capital of Nordex attained 36.27%. Furthermore, the governing body was informed of the takeover bid launched by ACCIONA Construcción, S.A. for the remaining 49.91% of shares in Polish company Mostostal Warszawa, S.A. at a price of €1.03 per share, increasing its stake to 62.13% of share capital.
- › It was informed of the responses to the DJSI 2019 survey, and the sustainability ratings analysed.
- › It conducted a self-assessment in connection with 2018, which concluded that the Board and its Committees were functioning adequately in the wake of the improvements implemented in the year.

## Priorities of the Board of Directors in 2020

They are previously submitted for consideration by the Board members with sufficient notice to introduce modifications and/or new matters of interest and, lastly, they are approved by them.

Ordinary Board meetings commence with the approval of the minutes of the previous meeting. Notable among the Board's priorities for 2020 are:

- › Preparation of the quarterly, half-yearly and annual financial statements prior to their publication for markets. Analysis of the reports by the Chairperson of the Audit Committee and the group's external auditors.
- › Analysis of the impact of the Covid-19 health crisis and measures to be adopted to tackle it.
- › Assessment of the Board of Directors and its Committees and officers in 2019. Supervision of the degree of compliance with corporate governance best practices. Report by the Chairpersons of all the Committees.
- › Review, approval and signing of the Annual Corporate Governance Report, the Directors' Report (Non-Financial Information Statement) and the Annual Report on Remuneration of Directors. Board Committees Reports.
- › Report by the Group's Head of Taxation prior to authorising the financial statements, in compliance with Codes of Good Tax Practices.
- › Supervision of the performance of the various businesses and corporate transactions.
- › Market/analysts' view. Policy on communications and contacts with shareholders.
- › Analysis and modification, where necessary, of the governance standards (Articles of Association, Regulation of the Board of Directors and Committees and Shareholders' Meeting Regulation) so as to adapt them to forthcoming changes in legislation and best practices in corporate governance.
- › Report by the Chairperson of the Appointments and Remuneration Committee concerning proposed fixed and variable remuneration for Executive Directors.
- › Notice of the Ordinary General Meeting of Shareholders and motions to be submitted. Reports by the Chairpersons of the Board Committees.
- › Preparation and review of reports on the motions submitted to the Shareholders' Meeting.
- › 2019 Sustainability Report. Report by the Chairperson of the Sustainability Committee.
- › Oversight of the progress with the external audit. Report by the Chairperson of the Audit Committee.
- › Supervision of the Risk Map. Report by the Chairperson of the Audit Committee.
- › Renewal of the Board of Directors and its Committees. Director Selection Policy.
- › Control of the degree of budgetary compliance based on revised core items. Reports by the division CEOs.
- › Group overview and strategy.

## Main actions by the Audit Committee in 2019

- › Supervision of the internal and external audit services' reports concerning the 2019 financial statements and the company's risks, including those relating to tax.
- › Verification of the external auditor's statement on its independence in relation to the company and related undertakings, received directly from the auditor and submitted subsequently to the Committee.
- › Internal review of the quarterly and half-yearly financial disclosures to the securities markets prior to publication.
- › Assessment and verification of the consolidated Non-Financial Information Statement in joint sessions with the Sustainability Committee.
- › Assessment of the degree of compliance with corporate governance standards and procedures, and the quality and efficiency thereof.
- › Supervision of the risk map and of the methodology used.
- › Authorisation of the Annual Corporate Governance Report.
- › Verification with external auditors, in the absence of the management team, of the quality of the relationship with managers and the auditor's confidence in the group's systems and information.
- › Supervision of the activity of the Corporate Compliance Department and of the Code of Conduct Committee.
- › Receipt of information concerning contacts and work with proxy advisors and authorisation of the required report.
- › Approval of the amendment of the Director Selection Policy to include new elements of diversity.
- › Compiling of information on measures and evaluation of risks in connection with Prevention of Occupational Hazards and Health and Safety in the Workplace, and concerning the Personal Data Protection Policy.
- › Planning with external and internal auditors of their respective tasks in the year.
- › Proposal on appointing the external auditor.
- › Preparation of a report on the assessment of the performance of the Board of Directors, Committees and officers.

## Priorities of the Audit Committee in 2020

The meetings calendar and work schedule of the Audit Committee are planned annually. Firstly, they are submitted for members' consideration sufficiently in advance to introduce changes and/or new issues that the directors might deem of interest, and, lastly, they are approved. Notable among the Audit Committee's priorities for 2020 are:

- › Reports by the Finance Department on the group's financial statements. External and internal audit reports.
- › Annual Internal Audit Plan.
- › Review of the Audit Committee assessment process.
- › Assessment of the degree of compliance with corporate governance standards and procedures in 2019, and the quality and efficiency thereof. Drafting of the report to be submitted to the Board.
- › Specific training programme for the Committee.
- › Approval of the 2020 Annual Plan of Activities. Supervision of the system of Internal Control over Financial Reporting (ICFR).
- › Report of Activities.
- › Assessment of the performance of the internal and external auditors. Review of remuneration.
- › Review and approval of the Directors' Report, including the Non-Financial Information Statement.
- › Analysis and modification, where necessary, of the Committee Regulation, with a view to adapting it to forthcoming legislative reforms and best corporate governance practices.
- › Report by the Director of the Group's Tax Department concerning (i) the Group's tax policy and (ii) monitoring/compliance with Codes of Best Tax Practices.
- › Review of the degree of compliance with the recommendations of the Good Governance Code of Listed Companies, especially those that might be modified.
- › Verification of the 2020 Annual Corporate Governance Report.
- › The group's Risk Map. Report on business trends and associated risks, as well as capacities to mitigate them.
- › Evaluation of criminal risks. Report by the Director of Compliance. Ethical Channel.
- › General matters concerning the performance of Internal Audit tasks. Review of the degree of compliance with the 2020 Annual Activities Plan.
- › Matters to be raised at the Ordinary General Meeting of Shareholders.
- › Analysis of any related-party transactions carried out in 2020.
- › Assessment of cybersecurity risks and report on measures for the Prevention of Occupational Hazards and Health and Safety.
- › Review of reports by proxy advisors.
- › General matters concerning the performance of Internal Audit tasks. Preview of the performance of the external audit team.

## The main actions of the Appointments and Remuneration Committee in 2019

- › Assessment of related-party transactions and verification that they were conducted in the course of the group's ordinary business, on an arm's-length basis, and in line with the requirements established in the Board of Directors Regulations.
- › Analysis of the remuneration for executive directors, the Board of Directors and the first and second tiers of the management team.
- › Made recommendations on proposals by the Board of Directors to the General Meeting of Shareholders in connection with appointments and re-appointments of independent directors.
- › Approval of modifications to the Director Selection Policy in compliance with recommendations regarding diversity.
- › Assessment, with the support of external consultants, of the degree of compliance with the criteria and objectives of the 2014 Share and Performance Share Delivery Plan, and the start of discussions to design a new long-term incentive plan for executive directors.
- › Approval of the proposed assignment of shares to the management team pursuant to the Share and Performance Share Delivery Plan and the Plan to Replace Variable Remuneration.
- › Approval of the Annual Report on Remuneration of Directors.
- › Receipt of information on the Annual Corporate Governance Report and on the degree of compliance with the recommendations of the Good Governance Code of Listed Companies.
- › Assessment of the quality and efficiency of the Board, Committees and officers and compliance with corporate governance standards and procedures.

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## Priorities of the Appointments and Remuneration Committee in 2020

The meetings calendar and work schedule of the Appointments and Remuneration Committee are prepared annually. They are previously submitted for consideration by the Committee members with sufficient notice to introduce modifications and/or new matters of interest to the directors. Lastly, they are approved by the Committee.

The priorities of the Appointments and Remuneration Committee for 2020 include notably:

- › Review of the Board's Remuneration Policy for the 2021-2023 period to be submitted to shareholders for approval at the General Meeting.
- › Proposed Compensation for the Management Team (including the Share and Performance Share Delivery Plan and the Plan to Replace Variable Remuneration) and the generally applicable Employee Share Ownership Plan.

- › Review and approval of the 2020 Annual Report on Remuneration of Directors and the 2020 Annual Corporate Governance Report.
- › Analysis of any related-party transactions carried out in 2020.
- › Assessment of the Board of Directors, Committees and officers in 2019.
- › Verification of the degree of compliance with the recommendations of the Good Governance Code of Listed Companies, especially those that might be amended.
- › Review of the 2020 Annual Corporate Governance Report.
- › Compensation of Executive Directors by means of analysis of fixed and variable remuneration with the support of external consultants.
- › Approval, where applicable, of the Regulations of the Appointments and Remuneration Committee in compliance with the provisions of the CNMV Technical Guide 1/2019.
- › Analysis of the needs of the Board of Directors and the Committees. Proposed renewal of Board appointments. Director Selection Policy and Reports.

## Main actions by the Sustainability Committee in 2019

- › Monitoring, analysis and approval of the progress made in the Sustainability Master Plan over the course of 2019.
- › Assessment and verification of the 2018 Non-Financial Information Statement in joint sessions together with the Audit Committee.
- › Approval of the 2018 Sustainability Report and 2018 Non-Financial Information Statement.
- › Review of the report on the alignment of ACCIONA's activities with the European Union's taxonomy.
- › Supervision of the group's new ESG risk map and general risk map.
- › Presentation and analysis of the results of consultations with third parties and, in particular, with investment analysts and communities.
- › Receipt of information on the inventory of greenhouse gas emissions.
- › Analysis of proposals to provide the Board with a training programme on sustainability.

## Priorities of the Sustainability Committee in 2020

The meeting calendar and work schedule of the Sustainability Committee are prepared on a yearly basis. They are submitted for consideration by the Committee members sufficiently in advance to enable them to introduce amendments and/or add items of interest, after which they are approved.

The priorities of the Sustainability Committee for 2020 include notably:

- › Advance in fulfilment of Sustainability Master Plan objectives.
- › Publication of the Sustainability Report for 2019. For the first time, this document and the Non-Financial Information Statement are one and the same.
- › Presentation of the ESG Risk Map.
- › Committee report on communication and engagement with local communities.
- › Preview of the 2020 Dow Jones Sustainability Index Report. Presentation and analysis of results.
- › Campaign for 2020 Volunteer Day.
- › Analysis of the SMP 2025 and approval, if appropriate.
- › Approval, if necessary, of specific terms of reference for the Sustainability Committee.
- › Preview of projects for 2020.
- › Proposed objectives for 2021.

## Periodic assessment of the Board of Directors and implementation of improvements

The Board of Directors assesses its activity each year, including the performance and contribution of each director and the diversity of composition and competencies. The 2019 self-assessment confirmed the proper working of the Board and its Committees and the improvement in information flows between the various bodies in the wake of the progress made in 2018.

In 2019, the Board of Directors expanded its operation and performance to include new duties, most notably:

- › Assessment of the changes proposed by the CNMV to certain recommendations enshrined in its Code of Corporate Governance.
- › Establishment of a specific training programme on sustainability for directors.
- › Adaptation of the Director Selection Policy to the latest legal developments in connection with diversity.
- › Institutionalisation of shared meetings between the Audit and Sustainability Committees in order to discuss matters relating to non-financial disclosures. Two joint sessions were held in 2019.
- › Two closed-door meetings were held between the Board and the external auditors.

- › Four closed-door meetings were held between the Audit Committee and the external auditors.
- › Four continuous training sessions were held by the Audit Committee.

Furthermore, in compliance with the Good Governance Code of Listed Companies, every three years ACCIONA conducts assessments with the help of external consultants, the last of which was conducted in 2017; the next is scheduled for 2020.

## Information provided to directors

The company has communication channels to ensure that directors have the necessary information to prepare for meetings sufficiently in advance. All members of the Board of Directors receive daily press dossiers and are informed of significant changes in legislation to help them in their duties.

The number of meetings of the Board and its Committees is planned at the beginning of each year and a calendar is established. Notice of ordinary meetings is given at least seven days in advance. Notices are accompanied by an advance copy of the foreseeable agenda and the appropriate written documentation, where this is available. In 2019, the information to be discussed at ordinary meetings was sent suitably in advance along with the meeting notice, in order to be analysed in depth. Business transacted is entered in the company's minutes books in all cases.

## Specific training and advice for directors

In order to provide directors with the necessary familiarity with ACCIONA and its group, the Board of Directors has an induction and programme for new directors. Moreover, it has a continuous training initiative for all its members, which includes, among others, matters concerning sustainability and, since 2018, cybersecurity. This matter occupies a considerable proportion of the Audit Committee's time.

The Audit Committee held four continuous training sessions, one with the External Auditor, another with the Internal Auditor, the third with the Finance Department and the last with the General Secretariat (Corporate Governance).

Board members are also entitled to request support from outside advisors in legal, accounting, financial or other matters in order to discharge their duties.

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## 2018-2020 Remuneration Policy and long-term variable remuneration

In 2017, the General Meeting approved a new director remuneration policy for the years 2018, 2019 and 2020, as a separate point on the agenda, in accordance with article 529 novodecies of the Capital Companies Act and article 31.5 of ACCIONA's Articles of Association.

The 2019 Annual Report on Director Remuneration, ratified on a consultative basis by the shareholders at the General Meeting, as well as by the Board of Directors, sets out the remuneration criteria for the Board members and provides individual details of the compensation received by each Board member (see Section C.1 of the report).

Director remuneration for membership of the Board of Directors and its Committees is a fixed annual amount. Executive directors' variable remuneration takes into account quantitative and qualitative objectives which contribute to a business model that promotes balanced, sustainable development and social cohesion. The variable compensation for ACCIONA's directors, as established in the company's policy, includes the necessary safeguards to ensure that it is linked to the beneficiaries' professional performance. In this connection, to align the remuneration of executive directors to the long- and short-term performance of the group, a significant portion of variable annual remuneration and remuneration received in shares is linked to quantitative business objectives.

Short-term variable remuneration takes account of the degree of attainment of the following estimates defined at the start of the year in line with the company's strategy:

- › 40% EBITDA
- › 20% EBT
- › 40% debt level

The annual assessment of executive director performance also includes specific sustainability objectives and metrics.

With respect to long-term variable remuneration, ACCIONA has a share-based compensation system. Pursuant to the provisions of the 2014 Share and Performance Share Delivery Plan, attainment of objectives is measured as a function of the strategic business indicators. Those indicators were established by the Board of Directors for the years 2014 to 2019, as detailed below:

- › Consolidated net debt/EBITDA ratio at the end of the last year of the reference period (25%).
- › Ordinary profit before taxes in the reference period (40%).
- › Net earnings per share in the reference period (25%).
- › Other criteria to be assessed by the Appointments and Remuneration Committee (10%).

<b>Director</b>	<b>Remuneration accrued in the Company in 2019 (thousand €) <sup>39</sup></b>
Mr. José Manuel Entrecanales Domecq	4,362
Mr. Juan Ignacio Entrecanales Franco	1,649
Mr. Juan Carlos Garay Ibargaray	272
Mr. Javier Entrecanales Franco	150
Mr. Daniel Entrecanales Domecq	158
Mr. Javier Sendagorta Gómez del Campillo	155
Ms. Ana Inés Sainz de Vicuña Bemberg	182
Mr. Jerónimo Marcos Gerard Rivero	155
Mr. José María Pacheco Guardiola	150
Ms. Karen Christiana Figueres Olsen	170
Ms. Sonia Dulá <sup>40</sup>	59

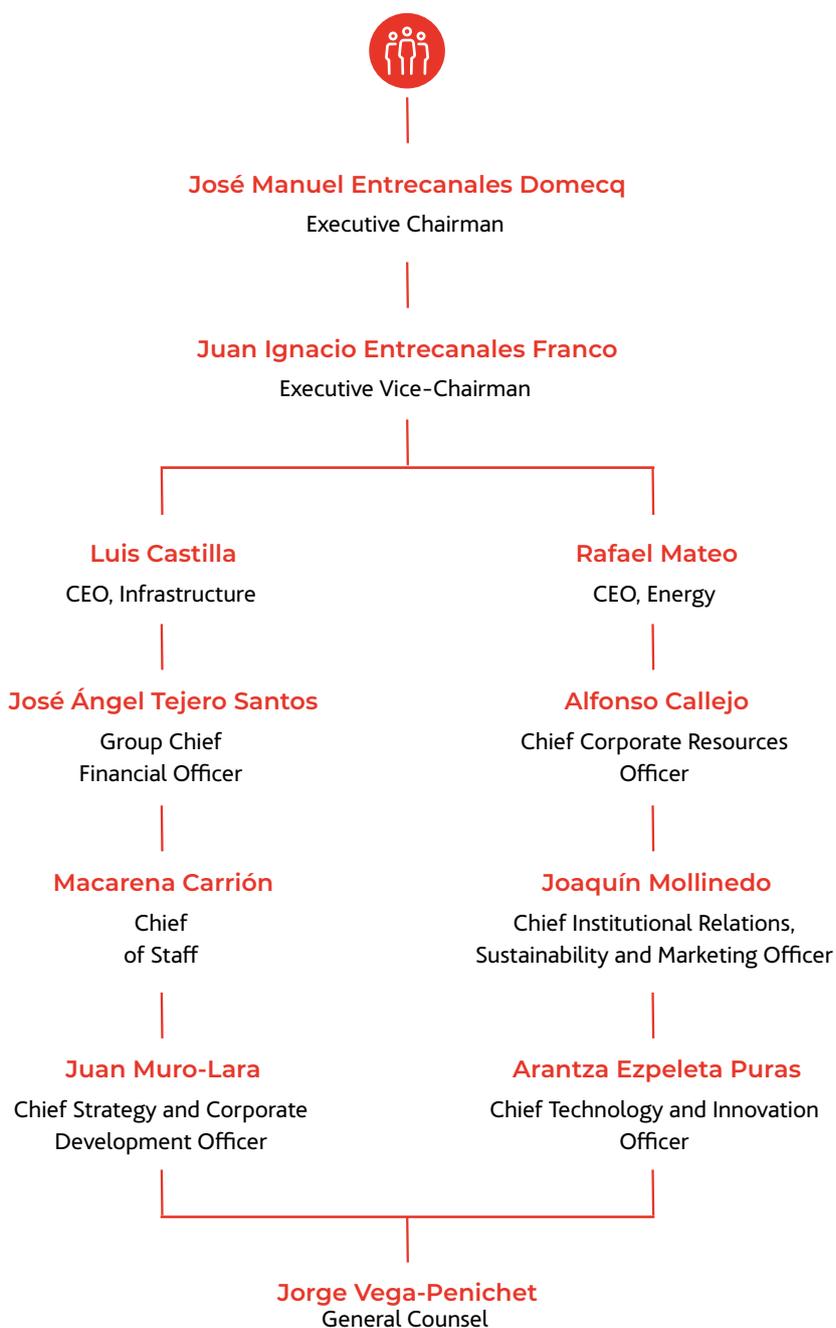
<sup>39</sup> Amounts corresponding to all the remuneration items included in the 2019 Annual Report on Remuneration. In other words, it includes fixed remuneration; remuneration for belonging to Board Committees; salary, remuneration in kind and gross profit from executive directors' vested shares or financial instruments; short-term variable remuneration; and long-term variable remuneration, among other items

<sup>40</sup> Ms. Sonia Dulá has been a member of ACCIONA's Board of Directors since her appointment was approved by the shareholders at the General Meeting of 30 May 2019.

⊕ More information in the 2019 Director Remuneration Policy, at [https://mediacd.n.acciona.com/media/3127729/directorremuneration\\_policy.pdf](https://mediacd.n.acciona.com/media/3127729/directorremuneration_policy.pdf) and the 2019 Annual Report on Remuneration at <https://mediacd.n.acciona.com/media/3544931/acciona-irc-2019.pdf>

## MANAGEMENT COMMITTEE

The Management Committee comprises eleven professionals with considerable multidisciplinary and international experience. This committee liaises between the Board of Directors and the rest of the company.



## Exemplary conduct under a compliance framework

Effective, strategic, customised governance **118**

Exemplary conduct under a compliance framework **138**

Integrated focus on risk control and management **140**

Diverse talent with expertise in designing a better planet **144**

Innovation to lead the change **148**

Leading the way to a sustainable, decarbonised economy **152**

### Ethics and integrity

ACCIONA's Code of Conduct establishes the values that underpin its business. The company has specific policies for combating corruption and bribery, and provides training in this area, all to ensure compliance with, and knowledge of, the company's ethical framework.

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### THE COMPANY'S CODE OF CONDUCT

ACCIONA's ethical principles and guidelines for action are grounded in the Code of Conduct and in the Policy Book implementing it. The purpose of the Code of Conduct is to establish the values that should guide the behaviour of all persons related to the company: executives, employees and third parties. Its objective is to establish a form of business conduct that is accepted and respected by all, while rejecting outright all illegal business practices and any inappropriate behaviour in the workplace.

Through the Code of Conduct, the company undertakes to conduct its business in accordance with current local legislation and the highest international standards.

To ensure compliance with the rules and guidelines for action, ACCIONA has a Code of Conduct Committee, a Compliance Department and an Internal Audit Department, which supervise the operation and effectiveness of the procedures, controls and internal commitments established for that purpose. They are responsible for ensuring that the ethical, organisational, environmental and social obligations, both those imposed by law and those adopted voluntarily, are complied with, and that the related risks are identified, and avoided or mitigated. The Compliance Department reported to the Board of Directors Audit Committee on four occasions in 2019.

The Code of Conduct Committee supervises the operation of the Ethical Channel, and decides on the investigation of reports that are received by this means and any necessary measures to be taken as a result.

## COMBATING CORRUPTION, BRIBERY AND MONEY LAUNDERING

The company has specific policies to fight corruption, bribery and money laundering. They include mainly:

- › Anticorruption Policy: through its Internal Rules of Conduct, ACCIONA requires all employees to behave in an ethical, honest, upright and transparent manner. It takes action and adopts decisions against any act of corruption or bribery by employees or third parties acting on behalf of the company.
- › Crime Prevention and Anti-Bribery Policy: underscores the company's zero tolerance of illegal activities. It exercises permanent surveillance to prevent and detect illicit conduct, employs effective communication and awareness-raising mechanisms for all employees, and establishes a business culture based on ethics and compliance.
- › Anti-Corruption Guidelines: adopted by the Board of Directors in 2016, these rules provide guidelines on avoiding inappropriate conduct and are applicable to all employees and to all parties associated with ACCIONA (including agents, intermediaries, advisors, consultants and suppliers).

These guidelines are based on international standards and were implemented in the organisation through corporate rules and instructions applicable to all companies that are part of ACCIONA, to all its employees and to third parties that have a relationship with the group.

Additionally, in line with the commitment to combat corruption and bribery, a Organization and Management Model for Crime Prevention and Anti-Corruption has been implemented that establishes the group's general control environment in line with international best practices.

Those policies are implemented in the form of corporate rules and instructions covering such aspects as: donations and sponsorship, engagement of business consultants, interactions with public officials, gifts and hospitality, international trade sanctions, competition rules in the markets, recruitment, and the ACCIONA bonus. The rules apply to all companies that are part of ACCIONA, to all their employees and to third parties that have a relationship with the company.

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## TRAINING AND AWARENESS-RAISING TO ENSURE ETHICS

Compliance with these corporate standards is a priority for the company. For this reason, ACCIONA has expanded training programmes and intensified awareness-raising campaigns by assigning specific responsibilities in this area.

During 2019, 1,505 employees took the Code of Conduct course and 170 executives and managers took the Anti-Corruption Course. A classroom-based Money Laundering Risk Prevention course was introduced last year, and it was completed by 50 employees. A total of 172 employees completed the online version of that course.

## Integrated focus on risk control and management

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### Comprehensive risk control model

The company identifies, assesses and maps a range of corporate risk scenarios in order to enhance performance and decision-making. In its assessment, ACCIONA considers short-, medium- and long-term risks.

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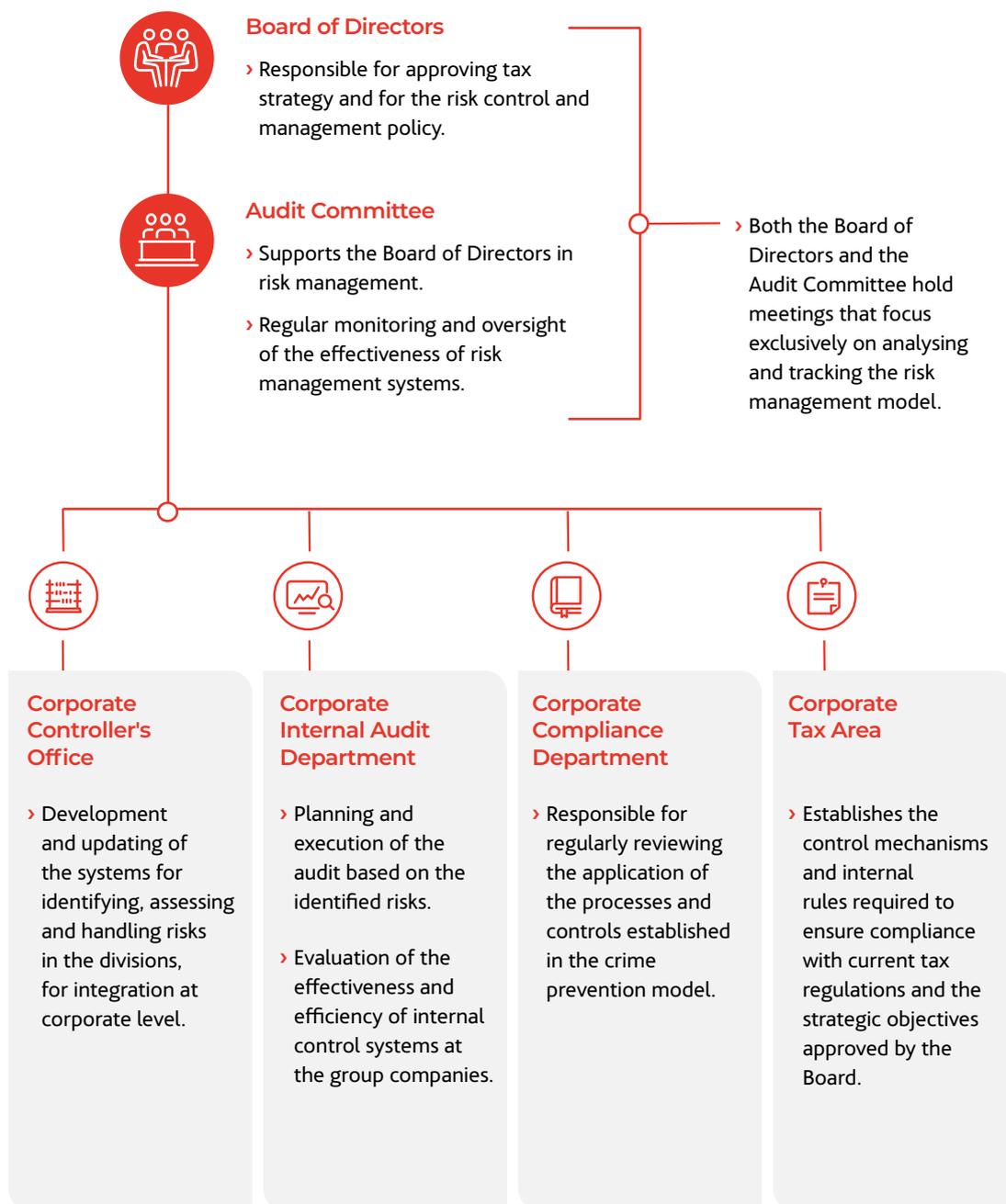
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Because ACCIONA is involved in a wide range of businesses and countries with very different regulatory, political and social systems, it needs to apply a diversity of approaches and mechanisms for managing and mitigating its risk exposure.

The Risk Management System supported by ACCIONA's Board of Directors is an integrated whole. A corporate team coordinates the identification, assessment and mitigation of the risks established in each of the business lines. That team determines the acceptable level of risk tolerance and coordinates the necessary actions so that risk management is aligned with the company's overall risk policy, making it possible at any time to know the level of exposure borne by the group as a whole.

#### Responsibilities in risk management

The Board of Directors supervises the effectiveness of the control systems, with the support of the Audit Committee.



ACCIONA's Risk Map identifies and evaluates risk events based on the likelihood probability of their occurrence and their potential impact in order to take appropriate management measures to mitigate or reduce them. During 2019, the company updated the group's Risk Map with a domestic and international scope by drafting separate risk maps for the business divisions.

It also continued to carry out a quantitative risk analysis, which standardises risk assessment parameters in order to integrate the group's risk as the sum of the risk of each business. This method makes it possible to assess the company's exposure to possible negative events at the division, area and global levels.

The results obtained in the Risk Maps are cross-checked and approved by General Management of each business unit, which performs an essential assessment (impact, probability of occurrence) prior to the implementation of specific control measures to mitigate risk, and another assessment after the measures have been implemented.

ACCIONA considers it is essential to identify, evaluate and manage social, environmental and governance risks in order to mitigate them and improve its sustainability performance and the relationship of trust with stakeholders.

ACCIONA's risk assessment methodology enables it to evaluate climate change, environmental, social, labour, governance and corruption risks for each business, in the more than 30 countries where it operates, as a function of the likelihood, the economic and financial consequences and the potential impact on the company's reputation.

## Corporate risk scenarios

The risk scenarios considered in ACCIONA's Risk Management System are categorised in seven groups: financial, strategic, operating, unforeseeable, environmental, social and compliance. Group executives have identified financial and strategic risks as being the most important.

Risk scenarios	Risk description
Financial risks	They relate primarily to fluctuations in exchange rates, interest rates and financial markets, changes in commodity prices, liquidity, cash flow, bad debts and loss of customers.
Strategic risks	Risks which result in reduced growth by the company and failure to meet its objectives due to an inability to respond in a dynamic competitive environment. They include organisational changes, investments and divestments, competitive threats, economic and political changes, changes to the law, the impact of new technology, and research and development.
Operational risks	Risks related to processes, people and products. They are linked to regulatory, legal and contractual compliance, control systems and procedures, the supply chain, ancillary services, information systems, employee productivity, and loss of key personnel.
Unforeseeable risks	Risk related to damage to assets and civil liability, which may impair the company's performance (including cybercrime).
Environmental risks	Mainly associated with the company's contribution to climate change through greenhouse gas emissions, as well as adaptation to new climate conditions, waste management, and the use of natural resources and energy.
Social risks	Linked to compliance with human rights, labour standards in the supply chain, workplace health and safety and the relationship with communities in order to obtain the social licence to operate.
Compliance risk	Relate to the set of rules or principles that define the ethics, rights, responsibilities and the expectations of stakeholders with an interest in corporate governance.



## Specific social and environmental risks

Risks related to sustainability are identified exhaustively with the participation of the heads of the areas directly or indirectly related to this matter. The result of each risk assessment is checked with each business unit's exposure in the countries where it operates. This exposure is assessed using external indices that support this comparison in order to detect areas to be strengthened.

Additionally, for the most significant risks, specific risk treatment plans are drafted in order to minimise the consequences or the associated probability.

The Sustainability Report 2019 contains full details of the sustainability risks.



## Medium-term risks: materiality analysis

Each year, ACCIONA performs a materiality analysis in order to guide the development of capacities and resources over the medium term. While the risk analysis is carried out with a one-year horizon, other tests (materiality analyses) are carried out with a 5-year horizon. They identify trends, behaviours, regulations, technologies and the competitive positions of other companies that might have an influence on the company's strategy.

The process and outcome of the materiality analysis are described in the annual Sustainability Report.



## Long-term risks: analysis of megatrends

The long-term vision, which is updated every five years, does not entail producing a budget. It is an analysis of external and internal opportunities based on observation of megatrends.

As part of this process, third parties are engaged to produce studies that support development of the company's plans and programmes. An example of this is the analysis of gaps in infrastructure development with a view to the Sustainable Development Goals, which is produced with the assistance of external advisors, as described in the chapter entitled *The first company of a new sector*. Other detailed surveys deal with critical business aspects such as:

- › Development of climate change regulations in Spain and Latin America, in cooperation with Real Instituto Elcano and London School of Economics.
- › Scope for the development of electric mobility in Latin America, drawn up by UN Environment.
- › A survey of renewable capacity in Spain and Chile, performed by Bloomberg Energy Finance.

Since 2017, climate change impact scenarios have been developed in connection with the company's long-term assets, by project type and technology. These analyses identify changes in climate and extreme weather events based on the scenarios proposed by the IPCC for 2050 and 2100. These analyses will be performed at the project level in 2020.

## Diverse talent with expertise in designing a better planet

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### People capable of transforming ideas into assets

ACCIONA has teams that are international leaders in executing infrastructure projects which are highly complex both technically and financially. Developing a business that drives the transition towards more sustainable economic models is only possible with a multidisciplinary team with diverse expertise.

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#### ACCIONA'S TEAM OF EXPERTS

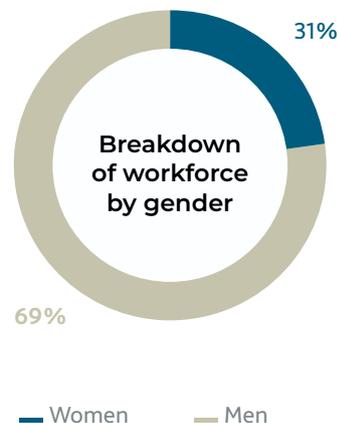
ACCIONA attracts, hires and works to retain the best talent with value propositions that enable them to grow within the company. The group's success depends on the skills and qualifications of its workforce.

The Talent Plan, a key part of this objective, aims to ensure that ACCIONA has the professionals it needs for its businesses and specific functions. The programme is implemented at global level in all countries and businesses. It consists of:

- › Analysing business challenges and opportunities and their impact on the management of employees and the company.
- › Identifying the most talented professionals, proposing individual development plans, and including them in each organisation's succession plan.

The number of job posts that were announced and covered through internal mobility increased to 21% in 2019, compared with 11% in 2018—proof of ACCIONA's firm commitment and loyalty to its people, contributing to their growth in the company.

**ACCIONA professionals - Key figures**



**HUMAN RESOURCES STRATEGY**

ACCIONA's Human Resources and Workplace Health and Safety Policy stands out for its focus on ethics in labour relations and safety as values which distinguish the way the company operates. Based on its commitment to the success and professional development of its employees, the group constantly invests in promoting talent.

The company has a 2018-2022 Strategy adapted to the current context, i.e. growing globalisation, new technologies and work methods that impact people. The goal of this strategy is to put people at the centre of the decision-making process.

Along these lines, ACCIONA has rolled out a people management model based on collaborative leadership. Team leaders are equipped with a broad set of tools and processes to enable them to effectively monitor employee careers and staff performance.

**People-centric**



**Attract the best talent**

- Comprehensive recruiting methodology:
- > Greater manager involvement in recruitment.
  - > Focus on the university: standardisation of programmes to attract talent across businesses, countries and initiatives.



**Collaborative leadership**

- Promoting collaborative leadership to improve managers' capabilities:
- > Training for managers: skills related to team development and effective communication.
  - > Programme for executives and pre-executives: focus on managing people and new forms of work.
- Leadership in goal-setting related to improving communication of the goals.

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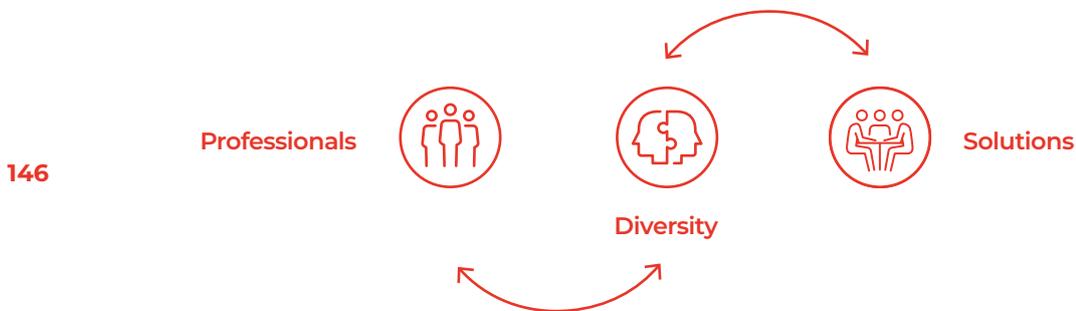
 <p><b>Development opportunities</b></p>	<p>More agile knowledge management and professional development:</p> <ul style="list-style-type: none"><li>&gt; Programmes to track new hires to help them adapt to their role.</li><li>&gt; Monitoring and feedback based on performance status and achievements to identify and track internal talent.</li><li>&gt; Decentralising remuneration mechanisms that are linked to performance.</li><li>&gt; Promoting internal mobility.</li></ul>
 <p><b>Attractive work environment</b></p>	<p>Working with the best: creating a respectful, inclusive, high-performing workplace that attracts talent.</p>

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## DIVERSITY AND INCLUSIVENESS

Promoting diversity and inclusiveness for specific groups is a priority for ACCIONA. One of the most effective tools for this is broadly promoting equal opportunities beyond gender diversity—from responsible hiring of groups at risk of social exclusion to leadership programmes for high-potential women. One of the main milestones achieved in 2019 was the appointment of the head of Diversity and Inclusion and the design of the Global Diversity and Inclusion Plan.

### Connecting diversity with the business model



In 2019, the Refinitiv Diversity & Inclusion Index positioned **ACCIONA among the top 25 companies in the world** in terms of diversity and social inclusion

The diversity and configuration of multidisciplinary teams—combining specialist profiles and local capabilities—enable the company to better respond to the sustainable development challenges in terms of innovation.

## ACCIONA UNIVERSITY

The mission of ACCIONA's Corporate University is to ensure training and development for the global workforce in line with the business needs. In addition to a conventional corporate training programme, through classrooms and high-tech rooms, employees have access to the Corporate University's Online Campus, which offers the latest in e-learning methodologies. The number of virtual classrooms increased in 2019 due to intense use of online classes, streaming and new-generation training options such as the WoW Room.

### Business School

The number of students in the M3+ Programme increased in 2019 and it maintained its excellent satisfaction ratings. The Programme extended its range, and sessions were taught from the WoW Room at IE Business School. The ACCIONA Executive MBA also completed its 9th year.

### Technical Schools

These training spaces were designed to improve productivity, technical excellence, specialisation and internationalisation on the part of ACCIONA professionals, guaranteeing a high level of skills.

The first edition of the International Master in Project Administration (IMPA) was launched in 2019. This programme focuses on the strategic needs of our infrastructure businesses, particularly on the technical capabilities required to manage complex projects in the various business areas and countries.

### Skills Development Centre

The Skills Development Centre provides the workforce with core courses to build the skills associated with each person's role within the company. The courses, which include videos by experts and learning modules, are available on the Online Campus.

### Language Schools

This platform is available to all employees and provides the opportunity to study six different languages.

## Technical Leaders Programme - Global Careers



### Objective

To recognise and support people with distinctive technical expertise and capabilities and enable ACCIONA to remain a leader in technical excellence, innovation and sustainability.



### Key events 2019

- › Monthly working sessions were held where the Master Technical Leaders presented and executed their plans for the technical transfer of knowledge.
- › The 5th Technical Leaders Forum in the Service area commenced with over 100 participants, including Management Committee members. The forum was streamed to the entire organisation and accumulated more than 2,000 views.

## Innovation to lead the change

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economy **152**

### Transforming ideas into new technologies

ACCIONA is committed to innovation throughout its value chain and activities. Thanks to its technology centres, intra- and entre-preneurship initiatives and other techniques and technologies, the company is able to lead the change and develop innovative solutions.

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In order to transform ideas into new technologies aligned with ACCIONA's strategy, it is necessary to guide innovation towards markets and clients that not only want their needs met, but also require guarantees of sustainability for people and the planet in the construction, water, services and energy businesses.

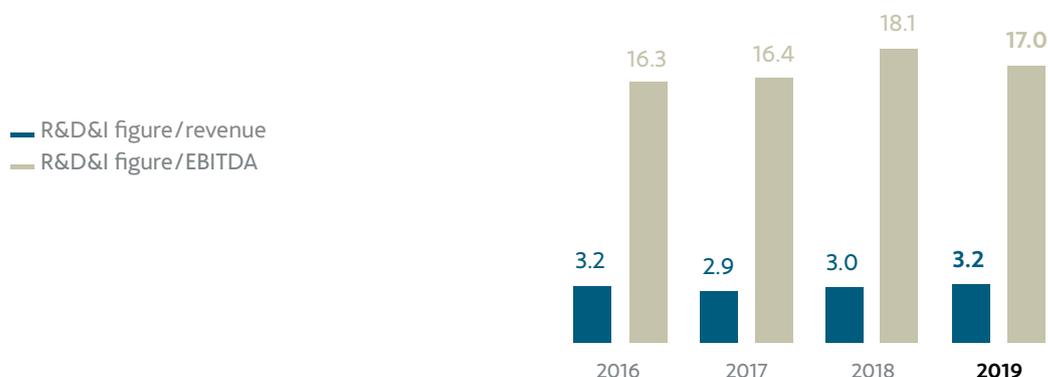
Innovation is the starting point for all of ACCIONA's operations, producing a multiplier effect in the creation of new businesses and in improving existing ones, and it allows the company to anticipate future trends and disruptions and adapt to the environment.

The Innovation Policy is the backbone that drives innovative solutions. It lays the foundation for maintaining competitiveness, internationalisation and sustainable development. The company is committed to the ongoing search for technology and business opportunities that add distinctive value to its activities.

ACCIONA's innovation spending reached a record 230.4 M€ in 2019, 2.2% more than in 2018. As a result, the company's spending in this area amounted to 3.2% of revenues, more than double the European average (1.5%). There were 120 projects in the portfolio in 2019, of which 41 are focused on research and 79 on innovation.

### Innovation spending

(%)



### INNOVATION IN SOLUTIONS

Innovation is present in the solutions developed by the company: in the management, storage, operation and maintenance of energy solutions and in water ranging from reverse osmosis desalination and ultrafiltration in treatment plants to advanced oxidation. ACCIONA leads technology development for smart cities, such as shared mobility, energy-from-waste technology, and the use of energy efficiency techniques in construction.

An example of the company's pioneering innovation is renewable energy storage, an area where ACCIONA uses the most advanced technologies. For example: hybridisation of power generation capacity and storage, storage in wind power systems for integration in the electricity grid, and the ILIS (Innovative Lithium-Ion System) project, under which the first system capable of accumulating more than 1 MW was installed in Europe, at the photovoltaic plant in Tudela, Spain.

**In 2019, ACCIONA's innovation spending reached a record 230.4 M€, 2.2% higher than last year**

As a result, the company's spending in this area amounts to 3.2% of revenues (innovation intensity), i.e. more than double the European average (1.5%). Number of projects under way

**120**

## TECHNOLOGY CENTRES

In Spain, ACCIONA has two technological innovation centres focused on construction and water. It also has a team specifically dedicated to energy innovation, operating in Spain and Mexico. Through these units, the company analyses new trends, works with innovative product manufacturers and integrates the best technologies into its projects.

In the area of renewable energies, the innovation team optimises production, develops new logistics and construction models, and researches all of the phases of wind, solar and biomass energy and storage. ACCIONA also applies innovation in the integration of renewable energies and energy efficiency processes in building.

In the Technology Centre focused on infrastructure, the team uses criteria established in many of ACCIONA's construction projects. The company leverages monitoring technologies, lifecycle analysis and the optimisation of processes such as underground construction. BIM and virtual reality ensure that the necessary modifications are applied at the design stage, saving money and time.

ACCIONA is at the forefront of infrastructure improvement due to innovative techniques, such as laser-guided systems in tunnelling, composite materials and recycled paving.

In ACCIONA's water technology centre, the company explores new water reuse methods and water treatment membrane technologies, as well as ways of reducing energy consumption at treatment plants. The research teams work in three phases: research in the laboratory, analysis in a pilot plant and subsequent application at industrial scale.

## ACCELERATING INNOVATION IN THE COMPANY

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ACCIONA'S Digital Innovation Hub (ADIH) helps integrate new technologies into the organisation as an instrument for driving future development. It's structured around seven skill centres.

The Digital Innovation Hub's skill centres focus on technologies such as large-scale 3D printing, with pioneering projects like the construction of the first replica of a cultural heritage item, the Arch of San Pedro de las Dueñas. Additionally, they're developing initiatives for smart cities, contributing to their efficiency and sustainability while also promoting the use of virtual reality for work meetings and applying data architecture at ACCIONA's energy services control centre. As part of their push for new technologies, this hub is also reinforcing data science for real-time project tracking, robotics and artificial intelligence as well as the use of blockchain technologies.

ACCIONA has also developed an intrapreneurship platform: I'MNOVATION #Intraemprendimiento. Its multidisciplinary horizontal teams create solutions to achieve the group's strategic goals. This initiative also facilitates participants' professional development by incorporating agile innovation methodologies, favouring networking between business units and promoting teamwork.

## Open innovation: I'MNOVATION #Startups, the accelerator for sustainable solutions

ACCIONA held the first round of its I'MNOVATION #Startups open innovation programme in 2017. Since then, more than 300 startups from around the world have presented technology solutions to respond to the proposed challenges.

As a result, two out of three companies that developed pilot projects jointly with ACCIONA teams have signed commercial agreements to continue working with the company. The objective of I'MNOVATION #Startups is to develop a model for relations with entrepreneurs that facilitates bringing outside talent into ACCIONA. In this way, the company aims to maintain its competitive advantage in the sectors where it operates while also exploring new business models.

In 2019, ACCIONA selected startups to address 16 challenges posed by all of its business units, to be implemented mainly in Spain and Chile. The company focused particularly on the mining industry, one of Chile's main economic drivers, to help make this sector more sustainable. ACCIONA also defined a number of challenges to address new methods for generating, storing and consuming renewable energy, and for personalising services.

**300 startups from around the world presented technology solutions as part of the I'MNOVATION #Startups programme**

**Two out of three companies** that developed pilot projects as part of this programme have signed commercial agreements with the company

## Leading the way to a sustainable, decarbonised economy

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### Managing sustainability

ACCIONA's commitment to sustainability is articulated in its Sustainability Policy, which is implemented through the Sustainability Master Plan 2020.

### GLOBAL SUSTAINABILITY FRAMEWORK

ACCIONA's commitment to sustainability focuses on social progress, environmental balance and economic growth. This commitment is reflected in its contribution to meeting the Sustainable Development Goals.

Action in connection with sustainability is spearheaded by the Board of Directors, which has a specific Sustainability Committee. The Sustainability Policy, which was approved by the Board, serves as the overall framework setting out the principles for the other guidelines contained in the company's Policy Book.

### ON TRACK TO FULFILLING THE SUSTAINABILITY MASTER PLAN 2020

ACCIONA's sustainability strategy is articulated mainly in its Sustainability Master Plan (SMP) 2020. The current plan is structured into strategic and operational objectives, which are applicable to the entire organisation and will be achieved through continuous efforts between 2016 and 2020. It is divided into seven areas of action: society, climate change, environment, corporate governance, people, value chain and innovation.

The initiatives and commitments in the SMP 2020 translate into specific objectives for the corporate areas and lines of business, where there are people with responsibility for pursuing and monitoring the established initiatives. Variable remuneration for executives, managers and some technical and support staff is partly tied to the degree of implementation of the company's sustainability strategy and the fulfilment of its commitments.

The SMP 2020 is coming to an end. A co-creation programme entitled Exponential Sustainability Leaders has been established to draw up the SMP 2025. A group of 26 professionals from different business units around the world will work to define the strategic lines of the new Sustainability Master Plan through a co-creation process. The members were selected by the CEOs of each business according to strict criteria of diversity and professional excellence. The programme was designed jointly by the Corporate Human Resources Department and the Global Sustainability Department. The process will conclude in April 2020 with the presentation of conclusions to the company's Management Committee.

 **More information** about the Sustainability Master Plan 2020 in the Sustainability Report  
<https://www.acciona.com/sustainability/>  
 and <http://smp2020.acciona.com>

## LEADERS IN RANKINGS AND RATINGS



A leader in sustainability, with the highest score in its industry according to S&P Global and RobecoSAM



2020 Global 100 Most Sustainable Corporations de Corporate Knights



FTSE4Good

Presence in FTSE4Good Europe and FTSE4Good Developed indices



Component of the Ethibel Sustainability Index Excellence Europe



Member of the CDP A List 2019 Climate and CDP Supplier Engagement Leader 2019



MSCI ESG 'AA' rating\*



ISS ESG 'Prime' status

2019 EU Industrial R&D Investment Scoreboard. European Commission Ranked #6 in Spain and #141 in Europe in terms of R&D intensity



TOP 100 COMPANY 2019 Diversity and Inclusion Index

Among the top 25 companies in the world in terms of diversity and social inclusion

New Energy Top 100 Green Utilities Energy Intelligence "Greenest" electric utility in the world



Industry leader in the Merco ranking of Corporate Responsibility and Corporate Governance

EcoAct Sustainability Reporting Performance study #6 worldwide and #2 in the Ibex-35 in terms of sustainability reporting

\* **DISCLAIMER:** the use by ACCIONA of any MSCI ESG Research LLC or its affiliates ("MSCI") data, and the use of MSCI logos, trademarks, service marks or index names herein, do not constitute a sponsorship, endorsement, recommendation, or promotion of ACCIONA by MSCI. MSCI services and data are the property of MSCI or its information providers, and are provided 'as-is' and without warranty. The MSCI names and logos are trademarks or service marks of MSCI.

# About this report

## Approach of ACCIONA's Integrated Report 2019

This report contains all the information, both financial and non-financial, that is relevant to the company's stakeholders, including not only a review of the company's performance in recent years but also a prospective view based on an analysis of the current context, expected performance and the company's plans.

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ACCIONA presents its eighth Integrated Report, referring to 2019 and drawn up in accordance with the guidelines of the International Integrated Reporting Council (IIRC). The objective of this document is to show the relationship between corporate strategy and financial performance within the various contexts in which the company operates. The reader is provided with information about the factors driving the decisions that create value in the short, medium and long term.

### **CONTENT ORIENTATION**

This report was drawn up on the basis of the overall context and the trends in the markets where the group operates, the goal being to identify the issues with the greatest impact on ACCIONA's businesses.

These issues are assessed by the company's management, which is aware of the strategy and the environment in which ACCIONA operates. That assessment, together with the milestones in the year and the company's future outlook, are used as the basis for preparing the Integrated Report 2019.

The content of the report responds to the needs and demands of the company's stakeholders, particularly investors and clients, who seek detailed information about ACCIONA's operations and actions.

## RELEVANT MATTERS FOR DISCLOSURE

ACCIONA uses the matters identified as being relevant for the company as the basis for the information set out in the Integrated Report 2019. The issues found to be sufficiently relevant for inclusion in the report are as follows:

### Material issues

- › **Investment** in SMART infrastructure.
- › **End-to-end solutions developer.**
- › **Long-term asset operator.**
- › **Focused growth and diversification** to minimise risk.
- › **Recurring cash flow.**
- › **Financial stability and shareholder returns.**
- › **Ability to connect the supply and demand for capital.**
- › **Competitive finance conditions.**

- › **A range of highly specialised business units.**
- › **Responding to the challenges** of sustainable development
- › **Positive impact on the planet.**
- › **Presence in markets** with growth potential.
- › **A culture of innovation** and technology development.
- › **Talent** capable of transforming ideas into assets.

## REPORTING SCOPE

The information and quantitative data, both financial and non-financial, contained in the report are for 2019 and refer to the entire scope of the company or of each of its businesses.

To facilitate comprehension of the company and its performance, the report contains past figures and facts so as to give a broader picture of the experience and knowledge acquired over time. The report also considers future scenarios, which are subject to the context of considerable uncertainty due to the global consequences of the COVID-19 crisis under way at the date of publication of this report.

## CONNECTIVITY

In line with the guiding principles of cohesion and connectivity, the contents—both quantitative and qualitative—of this report are supplemented by other corporate documents. The information here is also available on the company's website.

### Corporate reports

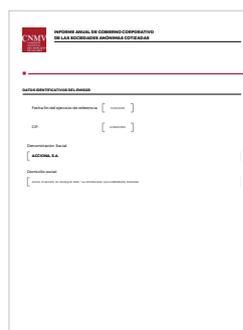
ACCIONA's website: [www.acciona.com](http://www.acciona.com)



Annual accounts



Sustainability Report



Corporate Governance Report



Earnings presentation Report

# Appendices

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### Key figures 2019

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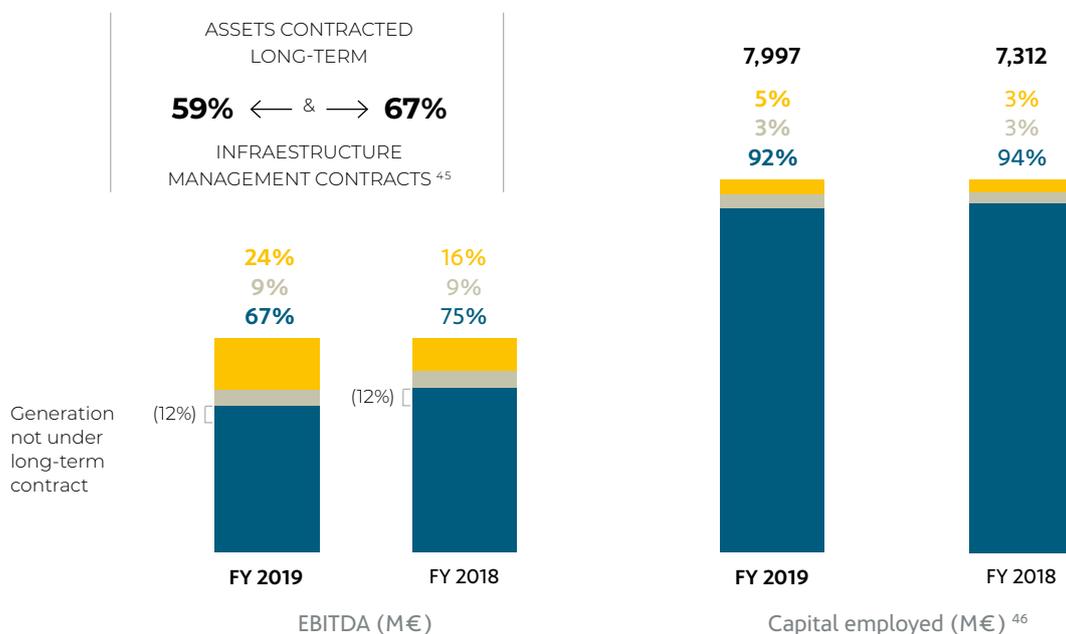
	FY 2019 (€m)	%Chg. vs FY 2018
Revenues	7,191	-4.2%
EBITDA	1,357	+9.0%
EBITDA like-for-like	1,255	+13.2%
EBT	545	+7.1%
Attributable net profit	352	+7.2%
Attributable net profit, excluding corporate transactions	352	+60.3%
	FY 2019 (€m)	FY 2018 (€m)
Total capital expenditure	1,241 <sup>41</sup>	1,022 <sup>42</sup>
Net financial debt	4,915	4,333
Net financial debt incl. IFRS 16	5,317	n.a.
Net financial debt / EBITDA	3.92	3.48 <sup>43</sup>

<sup>41</sup> The 2019 figure includes the sale of real estate assets for 63 M€ and of a road concession for 20 M€.

<sup>42</sup> The 2018 figures includes the share buyback programme.

<sup>43</sup> The 2018 ratio does not include an adjustment for IFRS 16.

**EBITDA and capital employed, by type of activity <sup>44</sup>**



**RISK**

- Long-term asset business
  - Renewable power generation
  - Infrastructure concessions - Transport, Social and Water
- Service business
  - Infrastructure services
  - Financial services
- Greenfield development
  - Greenfield infrastructure - EPC
  - Renewable energy development
  - Real estate development

<sup>44</sup> The percentages are calculated with respect to EBITDA and capital employed before consolidation adjustments, structural costs, etc.  
<sup>45</sup> % EBITDA from renewable power generation excluding the part not under long-term contract + Infrastructure concessions + Infrastructure services.  
<sup>46</sup> Does not include capital employed in equity-accounted affiliates (2018A: 962 M€; 2018A: 1,074 M€).

**ACCIONA has a resilient portfolio of projects with a balanced risk profile and attractive returns**

This enables ACCIONA to maintain a strong competitive position and a solid capital structure which it uses to constantly seek value-added opportunities

## Detail of capital expenditure

Detail of capital expenditure		
(€M)		
	Jan./ Dec. 2019	Jan./ Dec. 2018
Energy	608	554
› New energy capacity	509	554
› Nordex capital increase	99	0
Infrastructure	372	145
› Construction	45	22
› Concessions	268 <sup>47</sup>	4
› Water	15	58
› Services	44	61
Other activities	52	27
Ordinary net capex	1,031	726
› Real estate	210	100
› Own shares	0	196
<b>TOTAL capital expenditure</b>	<b>1,241<sup>48</sup></b>	<b>1,022</b>

<sup>47</sup> The 2019 figure includes the sale of a road concession for 20 M€.

<sup>48</sup> The 2019 figure includes the sale of real estate for 63 M€.



### Main milestones

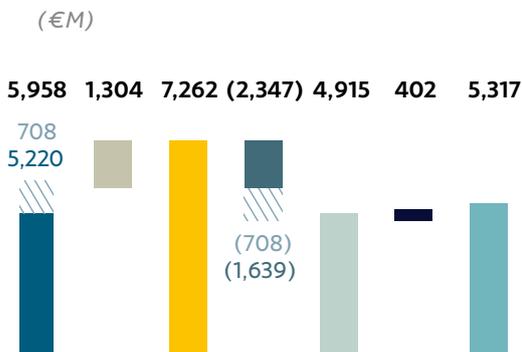
- › **The bulk of capital expenditure is discretionary growth capex.** Operation and maintenance expenses for renewable assets are included in EBITDA.
- › **Capital expenditure in Energy is related primarily to:**
  - New capacity, mainly in Chile (San Gabriel, Almeyda, Tolpan), the USA (Palmas Altas, Chalupa), Mexico (Santa Cruz, San Carlos, El Cortijo) and Ukraine (Dymerka).
  - Subscription of a 10% capital increase in Nordex.
- › **Investment in the Infrastructure division** during the period includes 281 M€ in the Sydney Light Rail concession and heavy machinery for international construction projects (mainly Canada).
- › **Investment in the real estate business** includes the acquisition of the landmark "Mesena" development project in Madrid.

**The bulk of capital expenditure is discretionary growth capex**

Operation and maintenance expenses for renewable assets are included in EBITDA

## Net financial debt

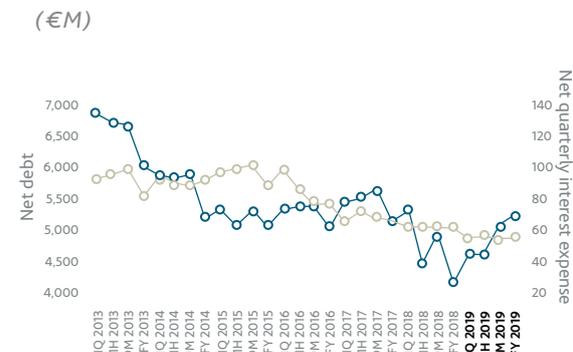
### Breakdown by type



Nordex tender offer: a revolving credit line was drawn to provide the 708 M€ deposit required to fulfil the "sufficient funds" requirement. The deposit was cancelled and the line repaid on 10 January 2020.

- Corporate debt
- Project debt
- Financial debt
- Cash + cash equivalents
- Net financial debt FY 2019
- IFRS 16 debt
- Net financial debt incl. IFRS 16 FY 2019

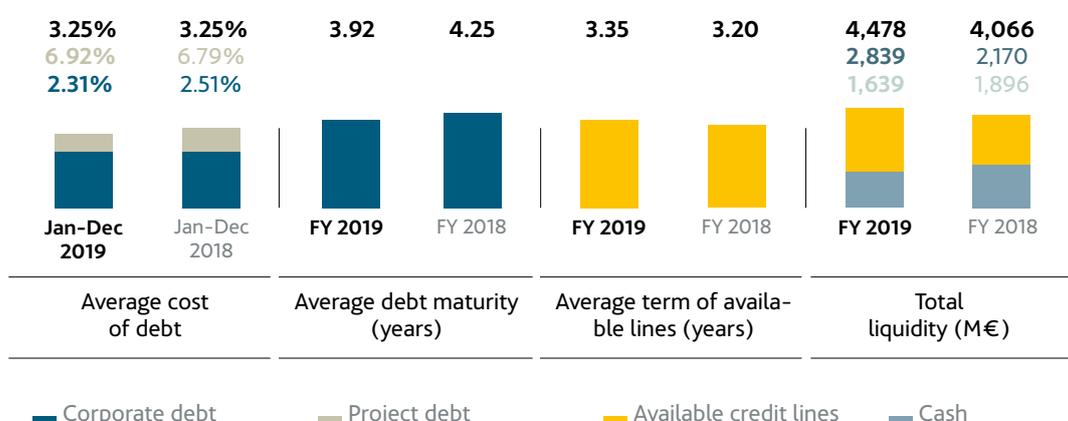
### Net debt and net interest evolution



- Net debt
- Net quarterly interest expense

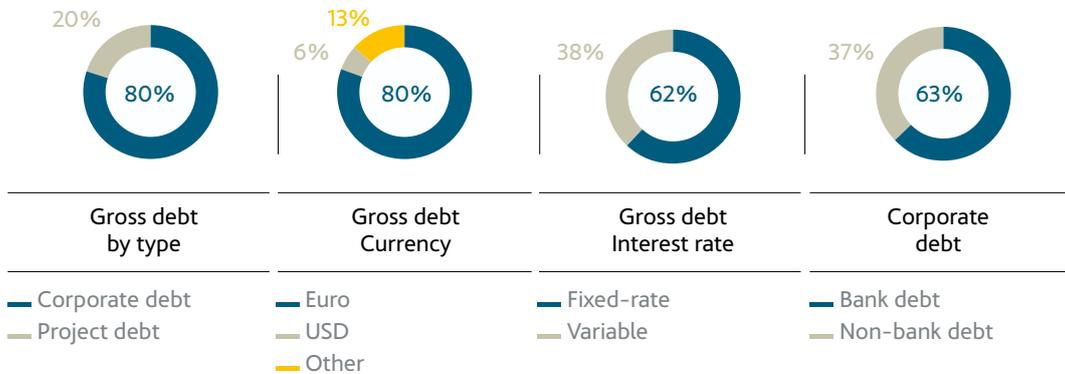
The **Net financial debt / EBITDA ratio was 3.92x** in FY 2019, in line with the finance policy

### Characteristics of the debt <sup>49</sup>



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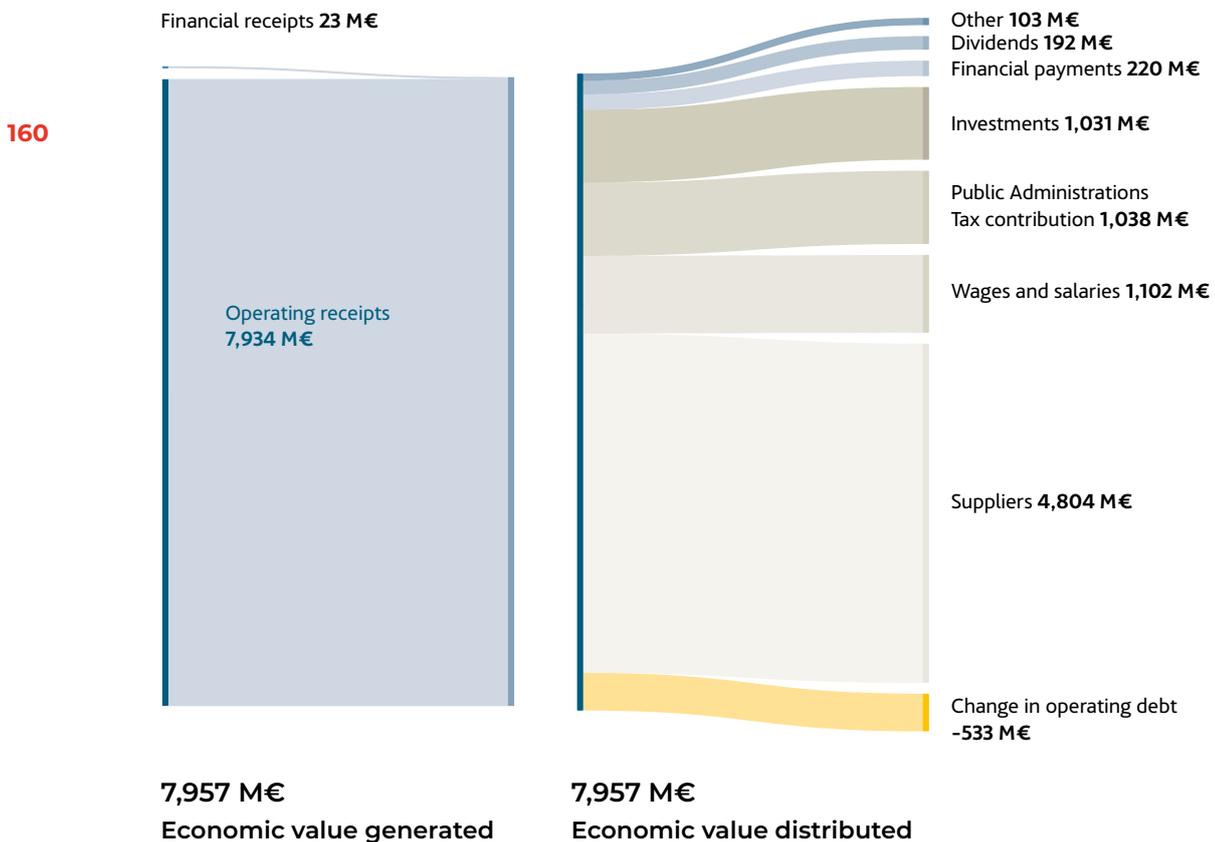
Characteristics of the debt <sup>49</sup>



<sup>49</sup> Figures do not include the effect of the cash deposit for the Nordex transaction.

Cash flow and tax contribution in 2019

Social cash flow is a means of calculating the impact that a company has on society and the real value it contributes through the cash flows generated by its activities. This is based on actual cash inflows and outflows that have an impact on the company's stakeholders.



### Operating receipts, government, suppliers, and wages and salaries. Breakdown by region.

Region	Operating receipts	Public. Adm. tax contribution	Suppliers	Wages and salaries
Spain	40%	61%	29%	47%
Asia & Oceania	22%	7%	27%	16%
Central and South America	19%	16%	24%	16%
Rest of Europe	12%	13%	13%	8%
North America	6%	2%	6%	12%
Africa	2%	1%	1%	1%
<b>TOTAL (€M)</b>	<b>7,934</b>	<b>1,038</b>	<b>4,804</b>	<b>1,102</b>

ACCIONA's economic and social contribution through the payment of taxes to Public Administrations amounted to 1,038 M€, of which 431 M€ (42%) were taxes paid and 607 M€ (58%) were taxes collected.

The group's tax contribution in 2019 amounted to 3 times attributed net profit. Accordingly, of every 100 € of revenues, over 14 € were allocated to paying taxes, principally in Spain, Poland, Mexico, Australia and Chile. Employment-related taxes were the largest single component.

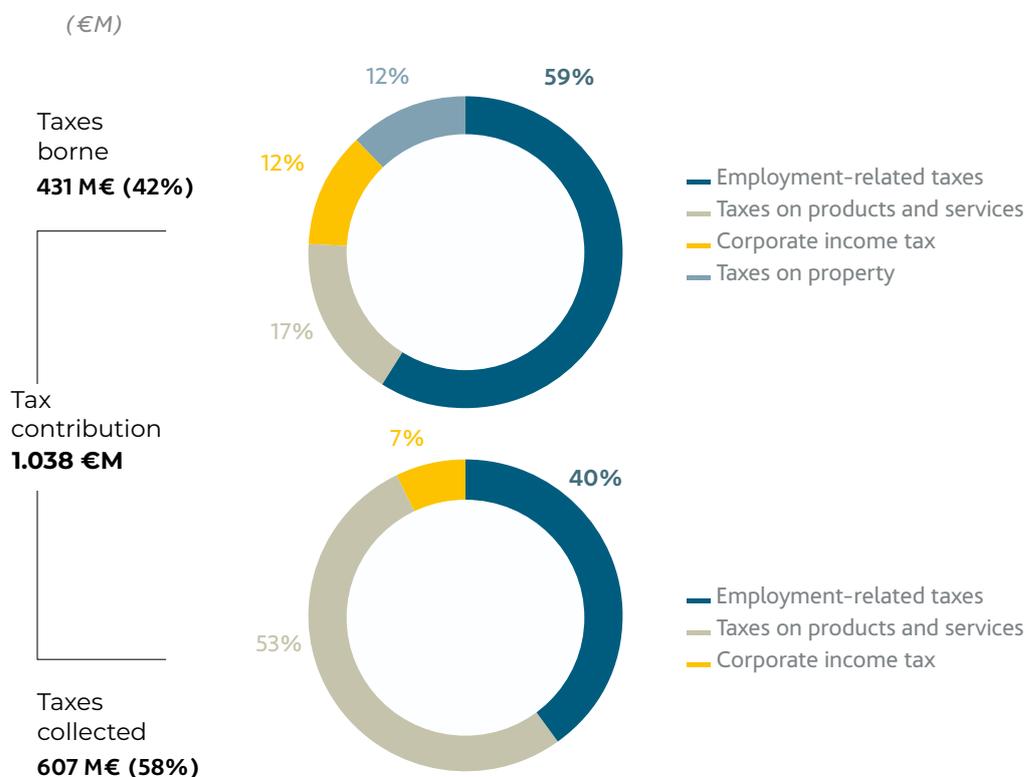
ACCIONA presents its Annual Report on Fiscal Transparency to the Spanish Tax Administration Agency (AEAT), in line with its adoption of the AEAT Code of Good Tax Practices (CBPT) in 2011. Since 2018, it has also delivered a Corporate Tax Transparency Report to the Australian Taxation Office (ATO). Additionally, in strict compliance with its obligations with regard to tax and fiscal transparency, the company submits a country-by-country report each year to the tax authorities.

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**ACCIONA's economic and social contribution in the form of taxes paid to governments**

amounted to **1,038 M€**, of which 431 M€ were taxes borne (42%) and 607 M€ were taxes collected (58%)

### Tax contribution. Breakdown of taxes borne and collected



### Total tax contribution. Breakdown by country

(€M)

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Region	Taxes borne	Taxes collected	Total	% of total
Spain	301	331	632	60.9%
Poland	8	63	71	6.8%
Mexico	36	25	62	5.9%
Australia	7	53	60	5.8%
Chile	16	28	44	4.2%
Portugal	13	15	28	2.7%
Ecuador	10	17	27	2.6%
Norway	3	14	17	1.7%
South Africa	1	10	11	1.0%
Other countries	36	50	87	8.4%
<b>TOTAL (M€)</b>	<b>431</b>	<b>607</b>	<b>1,038</b>	<b>100%</b>

Energy business

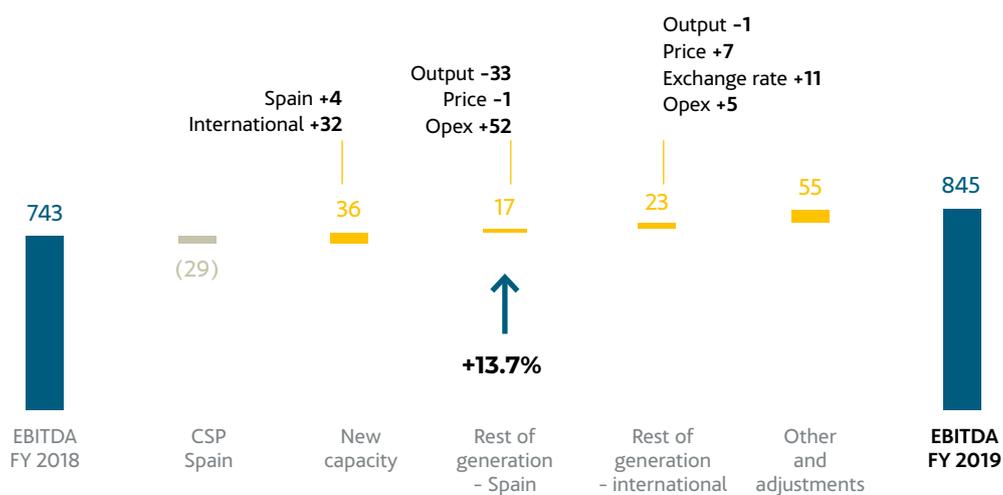
Key figures

(€M)

	Jan./Dec. 2019	Jan./ Dec. 2018	Chg.	%Chg.
Generation - Spain	766	854	-88	-10.3%
Generation - International	670	588	82	13.9%
Other and adjustments	562	765	-203	-26.5%
<b>Revenues</b>	<b>1,997</b>	<b>2,206</b>	<b>-209</b>	<b>-9.5%</b>
Generation - Spain	433	441	-8	-1.7%
Generation - International	435	380	55	14.4%
Other and adjustments	-23	-78	55	70.5%
<b>EBITDA</b>	<b>845</b>	<b>743</b>	<b>102</b>	<b>13.7%</b>
Generation margin (%)	60.5%	56.9%		

EBITDA

(€M)

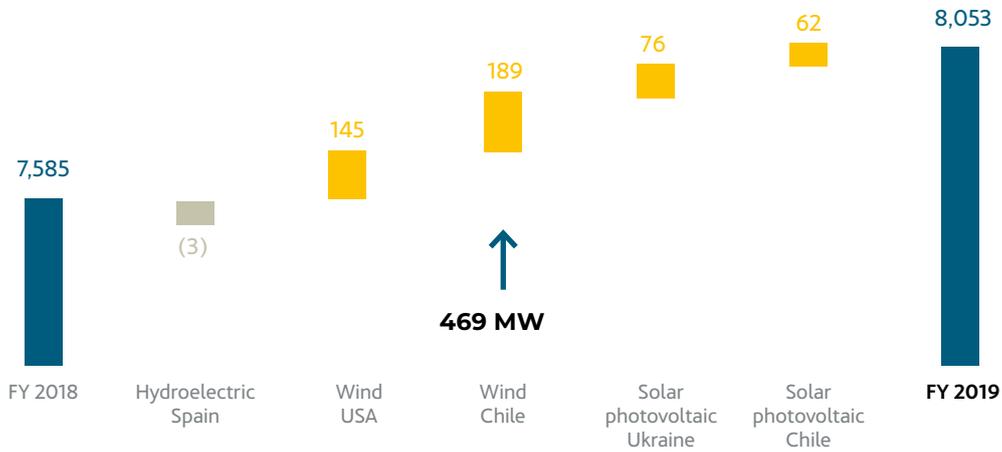


I Appendices

– Appendix I: Financial detail

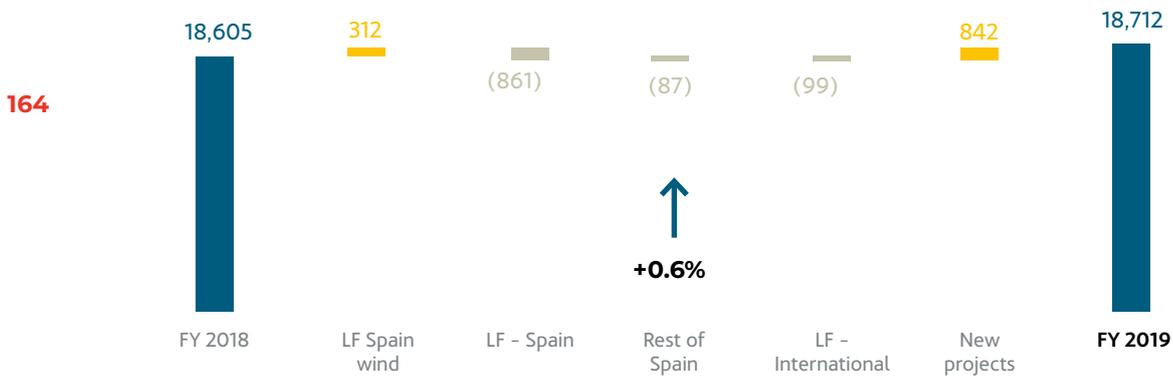
### Consolidated capacity

(MW)

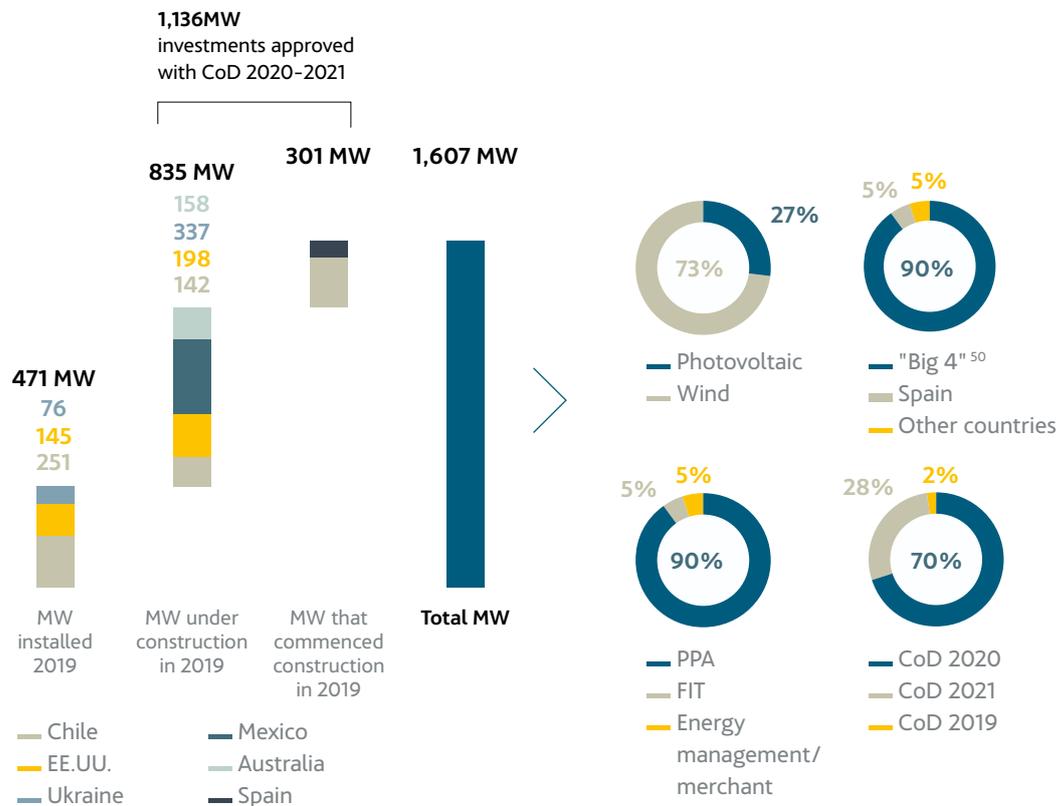


### Consolidated output

(GWh)



Like-for-like growth of **13%** – new capacity offset the decline in output and the sale of solar thermal assets



Forecasts are subject to change due to the global uncertainty caused by the COVID-19 crisis

<sup>50</sup> 'Big 4' countries: USA, Mexico, Chile, Australia

## Infrastructure business

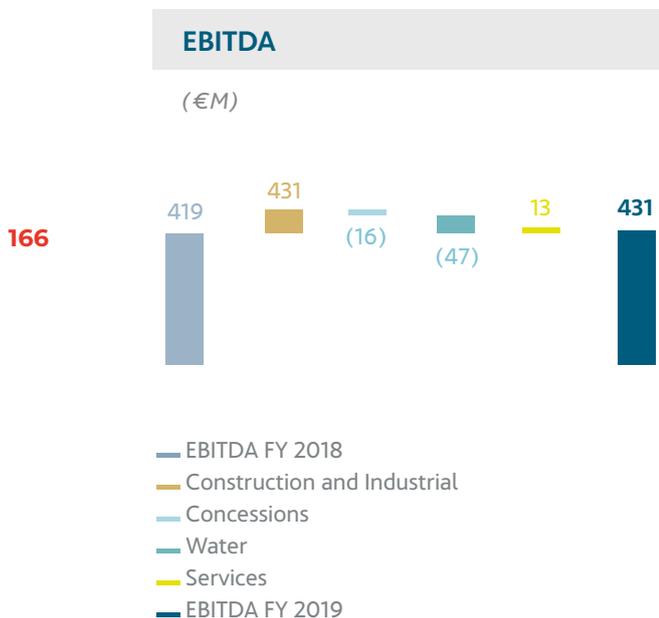
### Key figures

(€M)

	Jan./Dec. 2019	Jan./ Dec. 2018	Chg.	%Chg.
<b>Construction</b>				
Revenues	3,430	3,545	-115	-3.2%
EBITDA	289	227	61	26.8%
Margin (%)	8.4%	6.4%		
<b>Concessions</b>				
Revenues	78	108	-30	-27.7%
EBITDA	33	49	-16	-32.0%
Margin (%)	42.5%	45.1%		

Continues >

	Jan./Dec. 2019	Jan./ Dec. 2018	Chg.	%Chg.
<b>Water</b>				
Revenues	758	639	119	18.6%
EBITDA	66	113	-47	-41.4%
Margin (%)	8.7%	17.7%		
<b>Services</b>				
Revenues	824	800	24	3.0%
EBITDA	43	30	13	45.4%
Margin (%)	5.2%	3.7%		
Consolidation adjustments	-56	-33	-23	-70.1%
<b>Infrastructure total</b>				
Revenues	5,034	5,059	-25	-0.5%
EBITDA	431	419	12	2.9%



### Main milestones

- › Revenues practically flat, with EBITDA up 3%, as a result of the following factors:
  - Agreement reached in the Sydney Light Rail project, and acceleration of water desalination activity, both of which positively affected results.
  - Decrease in production on the big five international construction contracts <sup>51</sup> that are now mature, and changes in the scope (early termination of ATLL and sale of Rodovia do Açõ) that offset the aforementioned positive effects.

<sup>51</sup>Sydney Light Rail (Australia), Föllo Line (Norway), Quito Metro (Ecuador), Site C (Canada), Dubai Metro (UAE)

## Balance sheet and income statement

**Consolidated balance sheet for 2019 and 2018***(€ thousand)*

	<b>31.12.2019</b>	<b>31.12.2018</b>
<b>Asset</b>		
Property, plant and equipment	7,120,440	6,735,988
Investment property	49,524	130,800
Right of use	408,958	-
Goodwill	233,403	198,466
Other intangible assets	533,260	584,583
Other non-current financial assets	210,887	208,086
Investments accounted for using the equity method	1,116,520	1,000,822
Deferred tax assets	860,906	787,378
Non-current receivables and other non-current assets	777,400	355,959
<b>Non-current assets</b>	<b>11,311,298</b>	<b>10,002,082</b>
Inventories	1,248,116	914,311
Trade and other accounts receivable	2,090,946	1,700,814
Other current financial assets	198,592	178,305
Current income tax assets	85,128	107,475
Other current assets	266,492	317,201
Cash and cash equivalents	2,148,615	1,717,405
Non-current assets held for sale	-	-
<b>Current assets</b>	<b>6,037,889</b>	<b>4,935,511</b>
<b>TOTAL assets</b>	<b>17,349,187</b>	<b>14,937,593</b>

## Consolidated balance sheet for 2019 and 2018

(€ thousand)

	31.12.2019	31.12.2018
<b>Equity and liabilities</b>		
Share capital	54,857	57,260
Retained earnings and issue premium	3,578,495	3,637,683
Treasury shares	(28,633)	(199,616)
Translation differences	(183,520)	(205,902)
Interim dividend	-	-
Equity attributable to equity holders of the parent company	3,421,199	3,289,425
Non-controlling interests	219,490	205,713
<b>Equity</b>	<b>3,640,689</b>	<b>3,495,138</b>
Preferred shares, debentures and other marketable securities	696,646	405,980
Bank borrowings	4,599,674	3,673,960
Lease obligations	346,631	-
Deferred tax liabilities	577,964	475,929
Provisions	399,836	420,354
Other non-current liabilities	926,187	892,371
<b>Non-current liabilities</b>	<b>7,546,938</b>	<b>5,868,594</b>
Preferred shares, debentures and other marketable securities	1,054,059	1,243,758
Bank borrowings	911,984	904,838
Lease obligations	55,233	
Trade and other accounts payable	2,604,027	2,459,030
Provisions	311,104	231,888
Current income tax liabilities	59,000	60,366
Other current liabilities	1,166,153	673,981
Liabilities held for sale	-	-
<b>Current liabilities</b>	<b>6,161,560</b>	<b>5,573,861</b>
<b>TOTAL equity and liabilities</b>	<b>17,349,187</b>	<b>14,937,593</b>

## Consolidated income statement for 2019 and 2018

(€ thousand)

	<b>31.12.2019</b>	<b>31.12.2018</b>
Revenue	<b>7,190,589</b>	7,509,529
Other income	<b>684,344</b>	461,928
Changes in inventories of finished goods and work in progress	<b>16,426</b>	43,837
Cost of goods sold	<b>(2,021,196)</b>	(2,170,316)
Personnel expense	<b>(1,598,856)</b>	(1,486,319)
Other operating expenses	<b>(2,914,707)</b>	(3,113,997)
Depreciation and amortisation charge and change in provisions	<b>(656,709)</b>	(638,805)
Impairment and profit/(loss) on disposals of non-current assets	<b>8,592</b>	151,683
Other gains or losses	<b>(9,604)</b>	(129)
<b>Operating profit</b>	<b>698,879</b>	<b>757,411</b>
Financial income	<b>33,020</b>	48,600
Financial costs	<b>(264,932)</b>	(341,807)
Translation differences	<b>9,382</b>	2,506
Profit/(loss) from changes in value of financial instruments at fair value	<b>5,241</b>	(196)
Profit/(loss) of companies accounted for using the equity method	<b>63,184</b>	42,266
<b>PROFIT/(LOSS) BEFORE TAX</b>	<b>544,774</b>	<b>508,780</b>
Income tax expense	<b>(147,272)</b>	(136,323)
<b>Profit/(Loss) for the year from continuing operations</b>	<b>397,502</b>	<b>372,457</b>
Profit/(Loss) after tax from discontinued operations	-	-
<b>Profit/(Loss) for the year</b>	<b>397,502</b>	<b>372,457</b>
Non-controlling interests	<b>(45,824)</b>	(44,427)
<b>Profit/(Loss) attributable to the parent company</b>	<b>351,678</b>	<b>328,030</b>
<b>Basic earnings per share from continuing operations (€)</b>	<b>6.46</b>	<b>5.90</b>
<b>Diluted earnings per share from continuing operations (€)</b>	<b>6.46</b>	<b>5.90</b>
<b>Basic earnings per share (€)</b>	<b>6.46</b>	<b>5.90</b>
<b>Diluted earnings per share (€)</b>	<b>6.46</b>	<b>5.90</b>

## Appendix II Information about green funding projects

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ACCIONA's funding strategy focuses on providing the most efficient solutions in terms of both economic growth and positive impact. Based on market conditions and the business strategy, the company chooses between two sustainable finance formats. One is a formula through which the funds are committed to specific areas of the company's sustainable agenda via specific infrastructure or service projects. The other links the cost of funding to improvements in the group's environmental, social and governance (ESG) dimensions.

### FINANCING THE SUSTAINABLE AGENDA

This funding mechanism obliges ACCIONA to channel its investments to projects that contribute directly to the fulfilment of objectives linked to the sustainable agenda. The funds are mainly allocated to the development of renewable energy infrastructures, access to water and sanitation, sustainable mobility, circular economy and adaptation to climate change.

In this way, the company creates business opportunities capable of generating interest in the capital markets or the banks. Given this growing trend, in 2019 ACCIONA drew up a new green financing framework that expands its portfolio of eligible sustainable projects. The new scenario is based on projects' contribution to a low carbon economy, based on the eligibility criteria set out in the European Commission's taxonomy of green activities.

Funding transactions that choose this format fall under the scope of the European Union Green Bond Standard (EU-GBS) produced by the EU Technical Expert Group (TEG) on Sustainable Finance in June 2019. The EU-GBS is a voluntary standard available to issuers that wish to align with best practices in the market. It is designed to be globally relevant and accessible to issuers located both inside and outside the EU.

ACCIONA's Green Financing Framework was reviewed by Sustainalytics, which issued a Second-Party Opinion (SPO) <sup>52</sup> confirming alignment with market best practices: the Green Bond Principles (GBP) published by the International Capital Markets Association (ICMA), and the Green Loan Principles (GLP) administered by the Loan Market Association (LMA).

## Sustainable agenda funding transactions

Green transactions	Amount (million)	Maturity
Schuldschein EUR 155 M	155 EUR	Several
Bankia loan USD 55 M	55 USD	May 20
XS1737529468 EUR 59 M	59 EUR	October 2021
XS2036691868 EUR 66.4 M	66.4 EUR	August 2026
NSV EUR 50 M	50 EUR	October 2034
Syndicated loan Chile USD 200 M	150 USD	October 2024
Schuldschein EUR 167 M	167 EUR	Several
Unicredit loan EUR 50 M	50 EUR	January 2020
XS1631427322 EUR 17 M	17.9 EUR	June 2020
XS1684805556 EUR 65 M	65 EUR	December 2030
XS1525867104 EUR 22 M	22 EUR	November 2031
XS2122902468 EUR 50 M	50 EUR	February 2024

A total of 543 M€ were raised in 2019, in addition to the 348.3 M€ raised in previous years. After allocation of the funds to projects, the total amount remaining at the end of 2019 is 137 M€.

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## Projects and associated indicators

Funds under the previous funding framework were allocated to renewable energy. They were used to build the El Cortijo and Mt. Gellibrand wind farms. The instruments associated with the new fund allow investment in other sustainable projects, such as Quito Metro.



**Those projects and their associated social and environmental indicators are shown below.**

### El Cortijo wind farm (Mexico)

Located in Tamaulipas (Mexico). Construction began in 2017 and the plant was commissioned in 2018. It represents an investment of 235 M USD. As a wind power plant, its environmental benefit is that it mitigates climate change.

<sup>52</sup> Available at:

[https://accionacorp.blob.core.windows.net/media/3469809/second-party-opinion\\_acciona-s-green-financing-framework\\_november19.pdf](https://accionacorp.blob.core.windows.net/media/3469809/second-party-opinion_acciona-s-green-financing-framework_november19.pdf)

**El Cortijo wind farm impact metrics**

Rated installed capacity	183 MW
Power production in 2019	645 GWh
Emissions avoided per year, considering Mexico's conventional energy mix (IEA 2019 data)	374,556 tCO <sub>2</sub>
Number of homes equivalent to energy production (1 Mexican household consumes an average of 1,737 kWh per year)	371,057 households
Number of beneficiaries of social initiatives in the community in 2019 (estimated data)	173 people
Number of created jobs, according to our own socioeconomic impact study (estimated data)	5,676 job-years. A job-year is equivalent to a full-time job position with a one year length.

**Mt. Gellibrand wind farm**

Located in Victoria (Australia). Construction commenced in 2017 and it was commissioned in 2018. It represents an investment of 258 M AUD. As a wind power plant, its environmental benefit is that it mitigates climate change.

**Mt. Gellibrand wind farm impact metrics**

Rated installed capacity	132 MW
Power production in 2019	294 GWh
Emissions avoided per year, considering Mexico's conventional energy mix (IEA 2019 data)	257,705 tCO <sub>2</sub>
Number of homes equivalent to energy production (1 Australian household consumes an average of 6,839 kWh per year)	42,991 households
Number of beneficiaries of social initiatives in the community in 2019 (estimated data)	34,220 people
Number of created jobs, according to our own socioeconomic impact study (estimated data)	1,324 job-years. A job-year is equivalent to a full-time job position with a one year length.

**Quito Metro**

ACCIONA is building the first subway in Ecuador's capital city: 22 km long, with thirteen new stations in addition to two already built by the company. Construction commenced in 2016 and it will open to the public in 2020. As a low-carbon transport infrastructure, its main environmental benefit is that it mitigates climate change.

**Quito Metro impact metrics**

Emissions avoided due to fuel savings (planned data)	163,942 tCO <sub>2</sub>
Users (planned data)	400,000 passengers per day
Number of beneficiaries of social initiatives in the community in 2019 (estimated data)	19,218 people
Number of created jobs, according to our own socioeconomic impact study (estimated data)	32,760 job-years. A job-year is equivalent to a full-time job position with a one year length.

## Funding with ESG improvement targets

This funding formula includes conditions tied to ACCIONA's fulfilment of sustainable performance improvement objectives, in the environmental, social and corporate governance (ESG) dimensions. Achievement of the objectives is assessed regularly by international rating agencies or, in the case of specific indicators, by independent auditors.

### Funding deals linked to ESG objectives

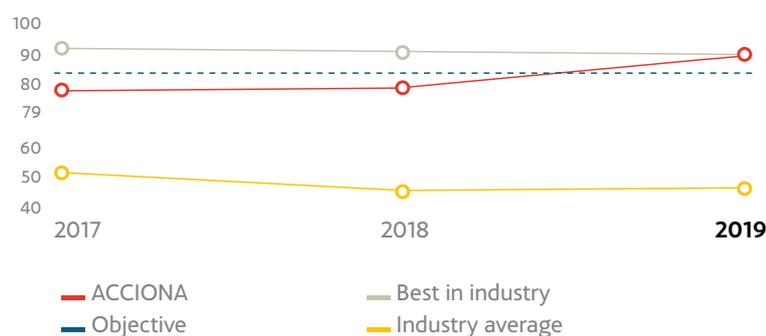
<b>Green transactions</b>	<b>Amount (million)</b>	<b>Maturity</b>	<b>Target index</b>
Bilateral Chile USD 30 M	30 USD	May 2020	CSA
Syndicated loan EUR 2,200 M -Tranche C	260 EUR	July 2022	CSA
Syndicated loan EUR 675 M	675 EUR	February 2024	CSA
Syndicated loan EUR 1,300 M	1,300 EUR	May 2024	CSA
Syndicated loan EUR 2,200 M -Tranche D	1,440 EUR	July 2024	CSA

The ESG variable to which this funding is linked is the Corporate Sustainability Assessment (CSA), performed annually by S&P RobecoSAM. The target was to raise ACCIONA's CSA score by 5 points from 79 out of 100 in the baseline year, 2018.

That goal was achieved in 2019, as ACCIONA scored 90 out of 100. ACCIONA's score matched the best of the utilities, the industry in which the company is classified.

### ACCIONA's CSA goal and performance

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## VERIFICATION OF GREEN FUNDING

ACCIONA has requested KPMG Asesores to provide an independent review on non financial performance indicators included in this Annex of the selected projects that have received green funding. For more information, see the following pages.

# Independent Assurance Report



KPMG Asesores, S.L.  
Pº de la Castellana, 259 C  
28046 Madrid

## **Independent Assurance Report on the non-financial indicators included in Appendix II Information about green funding projects in the 2019 Integrated Report of Acciona, S.A.**

(Free translation from the original in Spanish.  
In the event of discrepancy, the Spanish language version prevails.)

To the Management of Acciona, S.A.:

We have been engaged by Acciona, S.A. (hereinafter, Acciona) to review the non-financial performance indicators included in "Appendix II. Information about green funding projects" within its Integrated Report for the year ended at 31 December 2019 (hereinafter Appendix II), selected from those proposed by ACCIONA according the Second-party opinion letters available in [www.acciona.com/sustainability/sustainable-finance/](http://www.acciona.com/sustainability/sustainable-finance/) associated with the green bond issued in order to comply with the Green Bond Principles' fourth principle and under the framework of Green Bond Standard (EU-GBS) produced by the EU Technical Expert Group on Sustainable Finance.

Our report is presented in the form of an independent conclusion with a limited assurance indicating that, based on the work performed and the evidence obtained, there is nothing that has caught our attention and makes us think that the indicators are not reliable and do not comply, in all its material aspects, with the principles and guidelines for the determination of indicators included in the Sustainability Reporting Guidelines from the Global Reporting Initiative (GRI Standards).

The revised information is limited to the content of Appendix II above mentioned, in which Acciona has included selected non-financial indicators to comply with the current and projected progress of the environmental and social performance at El Cortijo (México) and Mt. Gellibrand (Australia) wind farms and Quito Metro in Ecuador (currently under construction).

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### **Responsibilities of Acciona management**

Acciona's management is responsible for the selection, preparation and presentation of Appendix II in accordance with the fourth principle of the Green Bond Principles (Guidelines and procedures for the issuance of green bonds) published by the International Capital Market Association, under the framework of Green Bond Standard (UE-GBS) produced by the EU Technical Expert Group on Sustainable Finance and the principles and guidelines for the determination of indicators included in the Sustainability Reporting Guidelines from the Global Reporting Initiative (GRI Standards). It is also responsible for the selection and presentation of the non-financial indicators of Appendix II from those proposed by the Second-party opinion letters associated with the green bond issued, including the establishment and maintenance of the control and performance management systems from which the information is obtained.



These responsibilities include the establishment of appropriate controls where Acciona's management considers necessary to enable that the preparation of non-financial indicators with a limited assurance review would be free of material errors due to fraud or errors.

## **Our responsibility**

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Our responsibility is to review Appendix II and report in the form of an independent conclusion with a limited assurance based on the evidence obtained. We conducted our engagement in accordance with the revised International Standard on Assurance Engagements ISAE 3000, "Assurance Engagements other than Audits or Reviews of Historical Financial Information" and the Standard ISAE 3410 "Assurance Engagements on Greenhouse Gas Statements", issued by the International Auditing and Assurance Standards Board (IAASB). This standard requires that we plan and perform our work to obtain a significant level of assurance about whether the Appendix II complies, in all its material aspects, with the principles and guidelines for the determination of indicators included in the Sustainability Reporting Guidelines from the Global Reporting Initiative (GRI Standards), as a basis for our limited assurance conclusion.

KPMG applies International Standard on Quality Control 1 (ISQC1) and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the Internal Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

## **Procedures performed**

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Our limited assurance engagement consisted of making enquiries of management and people responsible for the preparation of information presented in the Appendix II and applying analytical and other evidence gathering procedures. These procedures included:

- Analysis of the processes of compiling and internal control over quantitative data reflected in the Appendix II, regarding the reliability of the information, by using analytical procedures and review testing based on sampling.
- Review of the application of the Global Reporting Initiative's GRI Standards through the Sustainability Reporting Standards requirements for the preparation of reports.
- Reading the information presented in the Appendix II to determine whether it is in line with our overall knowledge of, and experience with, the environmental and social performance in the projects above mentioned.

Our multidisciplinary team included specialists in environmental and social business performance.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is lower than that of a reasonable assurance engagement. Under no circumstances may this report be considered an auditor's report.



## Conclusion

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Our conclusion is based on and subject to the matters described in this Independent Assurance Report.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusions.

Based on the limited assurance procedures performed and the evidence obtained, as described above, nothing has come to our attention that leads us to believe that the non-financial indicators included in Appendix II. Information about green funding projects, of Acciona's Integrated Report, for the year ended 31 December 2019 have not been prepared in all material respects in accordance with the principles and guidelines for the determination of indicators included in the Sustainability Reporting Guidelines from the Global Reporting Initiative (GRI Standards), including the reliability of data, the adequacy of the information presented and the absence of significant deviations and omissions.

## Purpose of our report

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In accordance with the terms and conditions of our engagement letter, this Independent Assurance Report has been prepared for Acciona in relation to its Appendix II. Information about green funding projects within 2019 Acciona's Integrated Report and should therefore not be used for any other purpose or in any other context.

KPMG Asesores, S.L.

*(Signed on original in Spanish)*

Patricia Reverter Guillot

30 April 2020

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