

ENVIRONMENT

Protection of natural resources



Focused on prevention and with the overall goal of decreasing the environmental impact of its activities, in 2016 ACCIONA focused its actions on the integrated management of environmental risks, water shortage and water stress, operational eco-efficiency, the promotion of the circular economy and the conservation of biodiversity.

CHALLENGES 2016	PROGRESS IN 2016
Improve efficiency in operations.	Identification of measures associated with the reduction of consumption and the reuse of water; minimisation and improvement of the quality of discharges; energy efficiency; waste reduction, reuse, recycling and recovery; optimisation in the use of resources and the use of recycled materials.
Prepare the document containing the waste management programme through to 2020 with the identification of pilot experiences.	Definition of the Waste Management Plan 2016-2020 for the promotion of circular economy in ACCIONA.
Create a portfolio of Life Cycle Analysis (LCA) projects.	Creation of a portfolio of 50 LCAs corresponding to 19 projects.
Develop plans to monitor and reduce water consumption in 10 production sites with intensive use of water resources.	Consolidation of 41 measures related to water consumption reduction and reuse.
Apply the water risk management methodology for at least one company activity.	Methodology applied to 100 % of the Grupo Bodegas Palacio 1894 business.
Highlight biodiversity-related actions.	Publication of the report ACCIONA, <i>Global Commitment to Biodiversity</i> , which presents highlighted actions of the company in the field of biodiversity conservation.

In 2016, ACCIONA provided its employees with a total of **55,860 hours' training** on environmental issues

CHALLENGES 2017



Make progress in the company's environmental risk management.



Make progress in the deployment within the organisation of the waste management plan for the promotion of circular economy.



Encourage the global promotion of purification, treatment and/or desalination in regions affected by water stress.



Supervise the company's action and compensation plans regarding biodiversity.

HIGHLIGHTS IN 2016

» Positive water footprint of 510 hm³, a figure equivalent to the annual domestic consumption of more than 10 million inhabitants

» Development of the Waste Management Plan 2016-2020 for the promotion of circular economy in ACCIONA

» 61% increase in environmental training for employees compared to the previous year

» Development of the first methodological document for the calculation of the biodiversity footprint

Value creation through the environmental variable

The preservation and respect for the environment is one of ACCIONA's basic pillars of action. The company has four specific policies approved by the Board of Directors: Environmental Policy, Biodiversity Policy, Climate Change Policy and Water Policy. These come together to form the ACCIONA Policy Book, which reflects the commitments and policies applicable to the company in economic, social and environmental matters (available from the company website:

<https://www.acciona.com/sustainability/environment>.

Compliance with the commitment to the environment is promoted by the Chairman and the Board of Directors, and is followed by Senior Management. Therefore, it is applicable to all lines of business and countries in which the company operates, and is also transferred to the circle of value and open to assessment by third parties.

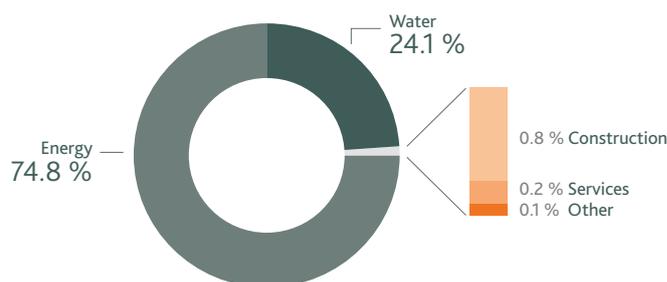
INVESTMENT AND ENVIRONMENTAL COST

42 % of the group's total sales and 72 % of EBITDA are based on businesses included in what the United Nations Environmental Programme (UNEP) defines as the "Green Economy".

In 2016, ACCIONA devoted 3,037 million euros to environmental activities, including for the first time operating expenses in renewable energies and desalination investment and expenses. Environmental expenditure rose to 2,438 million euros, whereas investment increased to 599 million euros. Of this total sum:

- 61 million euros derive from management (prevention, reduction or correction) of the environmental impact generated by the company's activity (57 million euros in expenses and 4 million euros in investment).
- 2,976 million euros derive from carrying out mainly environmental business (2,381 million euros in expenditure and 595 million euros in investment). This expenditure is relevant due to the strategic orientation of the business itself and is focused on managing the environmental impact generated by other actors, whose management is part of ACCIONA's business.

Breakdown of ACCIONA's financial environmental figures, by business line



'Other' comprises: Grupo Bodegas Palacio 1984, ACCIONA Inmobiliaria, Trasmediterranea and Corporate.

In 2016, ACCIONA obtained tax relief of EUR 0.7 million due to carrying out actions that promote environmental respect and protection.

FUNCTIONAL STRATEGIC STRUCTURE

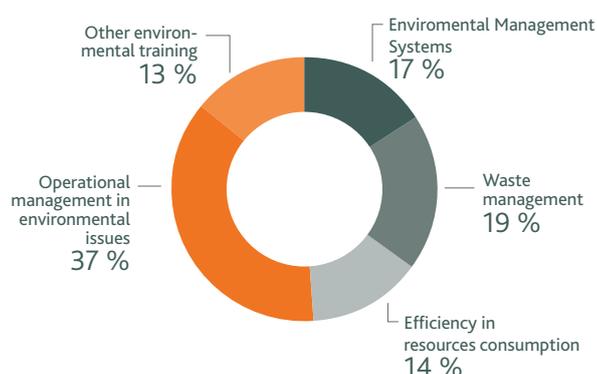
One of the keys to the ACCIONA business is being able to rely on specific, qualified staff at all functional, hierarchical and geographic levels of the company. This means that top quality and experience can be employed at all times in pursuing the company's business, always according to the strictest environmental standards.

As specified in the Sustainability Master Plan 2020, the development of strategic initiatives and fulfilment of goals in the areas of Environment and Climate Change are referred to the Sustainability Committee of the Board of Directors, in such a way that guarantees the integration of the environmental variable and the application of the environmental policies and principles in the company's business operations (more information in the Sustainability Governance section of ACCIONA's Commitment).

ENVIRONMENTAL TRAINING

In 2016, ACCIONA strengthened its commitment to training employees in environmental matters. A total of 55,860 training hours have been provided on topics such as waste management, efficient use of natural resources, environmental management systems and operational management of the environment. This figure represents a 61% increase compared to the previous year.

Percentage of training hours in 2016, by subject



Total hours of environmental training by division in 2016

Line of business	Hours
Energy	1,894
Infrastructure	53,241
Construction	9,715
Water	34,456
Services	5,242
Industrial	3,828
Other businesses*	430
Trasmediterranea	295
TOTAL	55,860

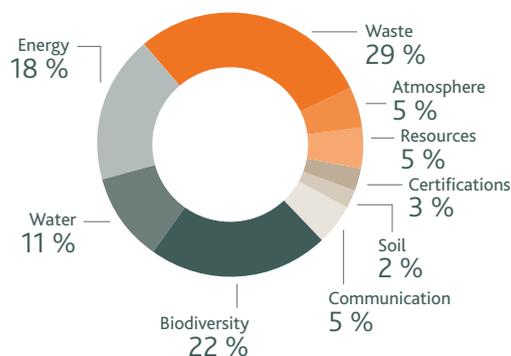
*Other businesses include Grupo Bodegas Palacio 1894, ACCIONA Inmobiliaria and Corporate.

GOOD PRACTICES AND UNIQUE ENVIRONMENTAL ACTIONS

ACCIONA identifies, analyses and values environmental actions, in order to recognise and publicise the most significant events within and outside the organisation. The company values the actions and selects those that stand out for their distinctly positive effect on the environment, their innovative nature or their scientific and/or social interest.

In 2016, 460 environmental actions were identified, analysed and valued in the different lines of business, of which 26 % correspond to Construction, 25 % to Water, 20 % to Energy, 19 % to Services and 10 % to Industrial, Trasmediterranea, Grupo Bodegas Palacio 1894 and ACCIONA Inmobiliaria.

Main fields of environmental actions analysed



Integrated Environmental Management

PRINCIPLES FOR A SUCCESSFUL ENVIRONMENTAL MANAGEMENT

ACCIONA's environmental management model, based on the principles of environmental performance improvement, establishes a common framework for action that makes possible to coordinate the various environmental management systems of each of the divisions. This model considers the identification of environmental aspects from a life-cycle perspective, as well as the identification of risks and opportunities to ensure improvement and the planned results.

In this respect, ACCIONA's environmental management systems are verified and certified by accredited independent entities in accordance with the ISO 14001 standard. In 2016, 87% of revenue was certified.

This model enables ACCIONA to set up systems by which to identify and evaluate the company's environmental footprint and establish mechanisms to facilitate its minimisation. The management model is structured based on the following elements:

- **Identification, assessment and minimisation of the environmental impact** that can be caused when carrying out the company's business.
- **Analysis of environmental risks** through regulated technical procedure that quantifies the risk of an accident that will result in environmental damages or will cause a negative environmental effect on ACCIONA's activities.
- **Identification and verification of legal requirements** by an online legal regulations and requirements tool that makes it possible to manage compliance of administrative obligations and other commitments acquired, besides those legally required. In 2016, there were 638 sites registered with the tool.
- **Operational control** by means of the corporate tool Métrica, that compiles the quantitative environmental information of each centre, making it possible to manage the environmental performance of the processes, set goals and define strategies.



The environmental management systems are **certified** by accredited independent entities

- **Registration and classification of environmental near-misses** at all ACCIONA sites and facilities. An environmental near-miss is any incident that does not result in damage to the environment but has the potential to do so. In 2016, the company recorded 177 environmental near-misses, such as effluent and fires. Of these, 26 incidents have resulted in significant spills with a total volume of 593 m³, related to small spills of contaminated water, minor oil and thermal fluid leaks and limited spills of chemical substances, among others. All cases were resolved satisfactorily by adopting corrective measures.
- **Implementation of continuous improvement tools** by groups and programmes to improve, identify and disseminate lessons learned and best practices.
- **Establishment of annual environmental goals** in all of ACCIONA's businesses, taking as reference the continuous identification of the most significant environmental aspects in the management systems and the Sustainability Master Plan.

ENVIRONMENTAL IMPACT ASSESSMENT AND MANAGEMENT

In 2016, 10 ongoing projects have been subject of Environmental Impact Assessments (EIA):

- Six of them are being processed by the competent public Administrations of Chile, Mexico and Spain.
- Four of them have obtained favourable environmental impact statements in Chile, Costa Rica and Spain.

The EIAs for these projects have been published in the relevant official journals and on the platforms enabled for such by the public administrations to channel local participation and receive any possible claims in this respect.

Additionally, ACCIONA has also carried out 289 Environmental Monitoring Plans (EMPs) centres and facilities under construction, operation and maintenance.

Furthermore, the company has also carried out specific environmental monitoring in 195 facilities with more than 338 complementary studies.

Environmental Risk Management at ACCIONA

Environmental Risk Management is integrated in the company's general risk management strategy and is promoted by its Board of Directors.

To do this, a procedural methodology is applied, to identify, assess, prioritise and notify to ACCIONA's decision-making bodies of any potential environmental events that may impact on the company and its centres, as well as those generated by the company and its centres that may impact on the environment.

Thus, action policies and tolerance thresholds are established to provide reasonable assurance about the goals being achieved.

The environmental risk management process includes the evaluation of present and future scenarios (short-, medium- and long-term), for which the probability of occurrence and consequences for the company and/or for the environment is analysed, focusing especially on:

- Risks to ACCIONA posed by climate change (see more information in the Climate Change chapter).
- Risks to the company posed by water resources.
- Risks ACCIONA's activity poses to the environment.

Additionally, with the aim of addressing risks that have led to environmental crises, the company has also procedural mechanisms in place for their management since 2011. These mechanisms make it possible to systematically identify these situations, and indicate measures to follow and the necessary responsibilities and resources for their adequate management.

Sustainable management of water resources as a strategic goal

Throughout its history, ACCIONA covered the supply needs of more than 90 million people in over 30 countries worldwide through its integrated water management cycle, responding to one of the largest environmental challenges faced by humanity.

POSITIVE WATER FOOTPRINT ON THE PLANET

The company calculates its water footprint on the basis of two international methodologies: Water Footprint and the Global Water Tool of the World Business Council for Sustainable Development. These methodologies take into account in the indicator both the impact on the water-resource reserves, and the variation in the water quality. Furthermore, ACCIONA takes into account the singularities of the business, highlighting the company's activities that favour the accessibility of drinking water and sanitation, both fundamental human rights recognised in 2010 by the United Nations General Assembly.

In 2016, ACCIONA's water footprint generated a positive impact on the planet of 510 hm³, a figure equivalent to the annual consumption of a population of more than 10 million people (based on the average consumption per person in Spain).

ACCIONA's water footprint trends by world region

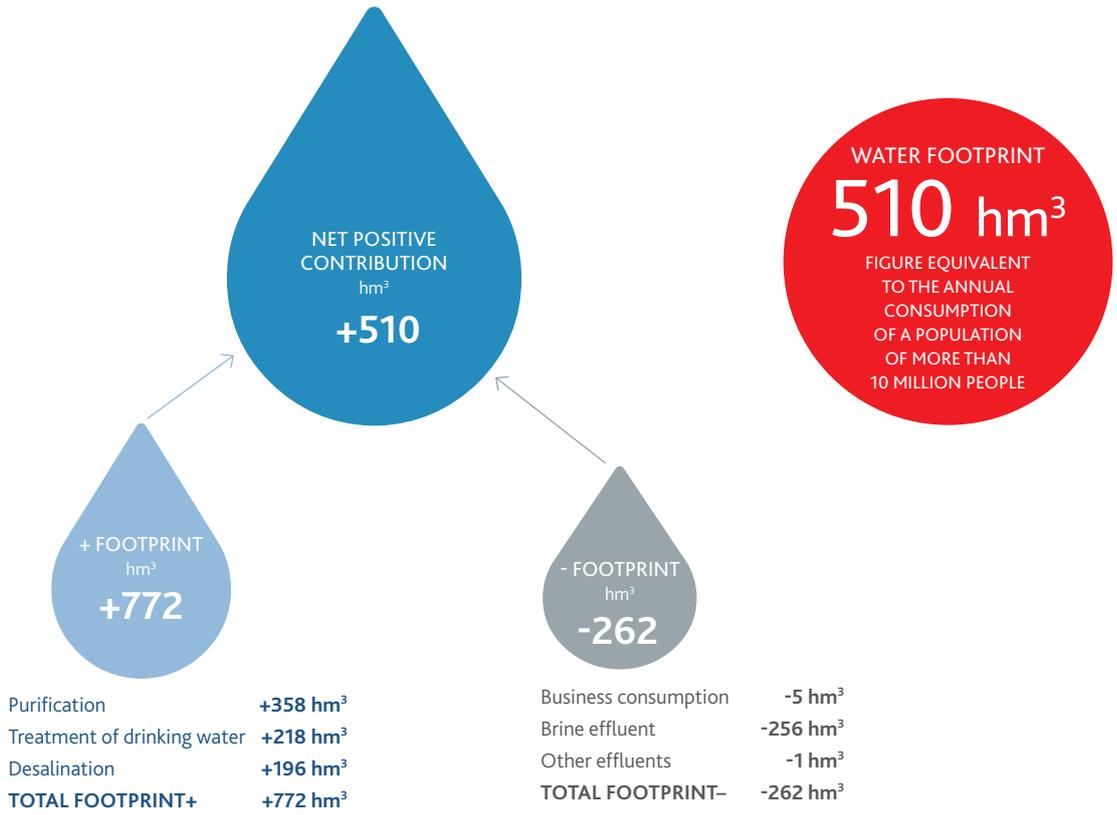
(hm³)

	Spain	Europe (excluding Spain)	North America (Canada, US and Mexico)	Central and South America	Africa	Asia and Oceania
2016	403.9	142.9	-0.2	2.4	-17.3	-21.7
2015	310.2	143.7	-0.2	-1	-0.7	39.1
2014	357	118.1	1.3	-1	-6.9	63.3
2013	375.6	160.4	2.1	-0.7	-4.3	29.3
2012	264.9	165.3	0.4	-0.6	-3.8	-0.1

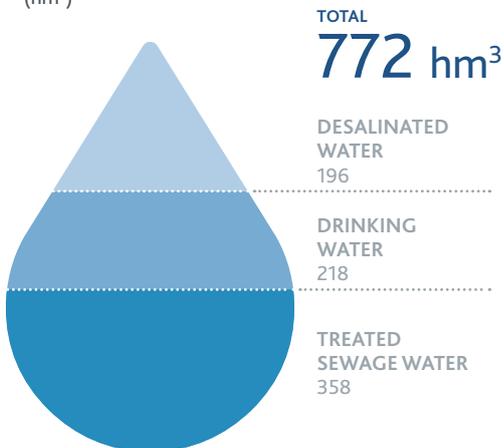
ACCIONA Agua is the line of business that contributes most to the entire group's water footprint, mainly due to the water treatment and purification activities that bring about an improvement in the quality of the water, and do not significantly affect the water resource reserves (see more information in the ACCIONA Infrastructure's Commitment chapter).

The improvement of the water footprint in 2016 is mainly due to the increase in the purification activity of the company, motivated by the full consolidation of ATLL (the upstream water concession in the Barcelona region).

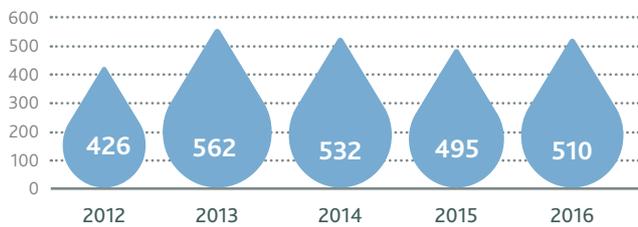
Balance of ACCIONA's water footprint



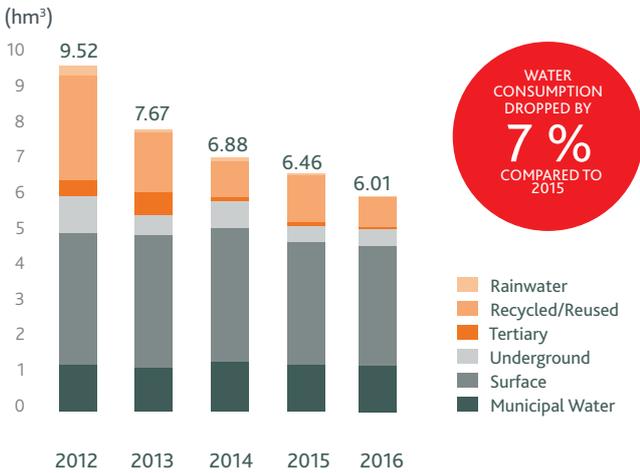
Water volume managed by ACCIONA (hm³)



ACCIONA's positive water footprint trends (hm³)

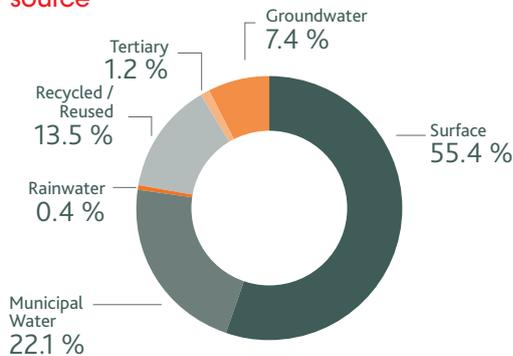


ACCIONA's water consumption trends



Furthermore, ACCIONA has continued its commitment to using water from recycled, reused, tertiary systems or rainwater, amounting to 15% of the company's total consumption.

Water consumption by source



WATER TRANSFERS BY ACCIONA

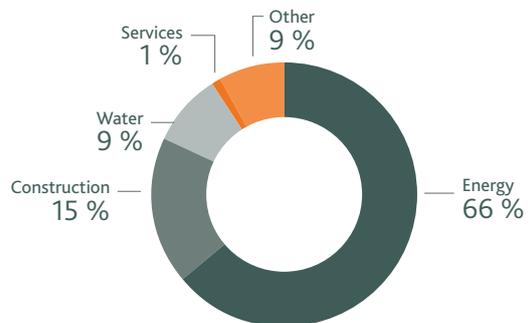
Certain facilities of the company use water in a way that does not imply consumption, given that once it is used, the water resource is returned to the place where it was collected. This process is carried out in the same quality conditions, and does not significantly affect surrounding ecosystems. Water considered under this section is referred as water transfers, and is classified as follows:

Water transfers by ACCIONA

(hm³)

	2016
Surface for refrigeration returned to source	21.3
Turbined in hydroelectric plants	28,097
Tertiary for refrigeration returned to intake at WWTPs	2.9
Groundwater and runoff water at sites	3.8
TOTAL	28,125

Distribution of water consumption by line of business

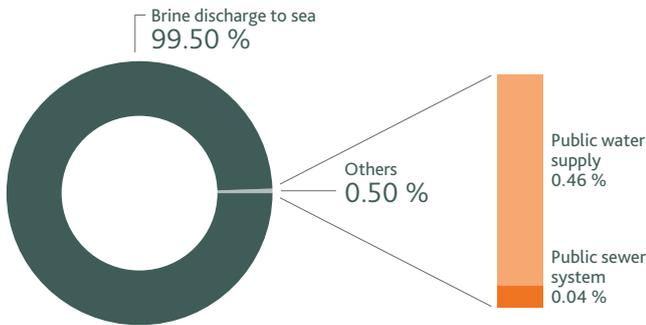


ACCIONA'S DISCHARGES

More than 99 % of the volume of ACCIONA discharges corresponds to the brine from desalination plants, with a total volume of brine returned to sea of 256 hm³.

Discharges to public sewer systems and to the hydraulic public domain have dropped by 4 % compared to 2015 and in compliance with the specifications of the corresponding discharges authorisations.

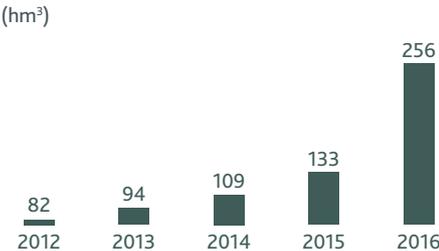
Distribution of discharges by type



Note: the distribution also includes a small percentage of Maritime-terrestrial public domain, which has not been represented due to being a very small percentage, below the level of the amounts represented in the figure.

15 % of the total water consumed by ACCIONA is **recycled**, from tertiary networks and rainwater

Brine discharges trends



ACCIONA MEASURES THE TOTAL WATER CONSUMPTION OF ITS SUPPLIERS

For the second consecutive year, ACCIONA has measured the total consumption of water associated to the activity of 100 % of its suppliers. The analysis, based on the information corresponding to more than 140 countries and 57 economic sectors, confirms the company as a leader in researching supply chain impacts.

The analysis carried out has made it possible to reach some interesting conclusions, for instance:

- A reduced group of suppliers accounts for up to 70 % of the water consumption in ACCIONA's supply chain.
- Less than 20 % of the water consumption is generated by direct suppliers.
- Two of the company's businesses concentrate most of the water consumption in the supply chain.
- The purchase of goods and services in certain countries and sectors has a decisive impact on the final consumption figures.

WATER-RELATED RISKS AND OPPORTUNITIES

The water risk management process involves all of the company's businesses and is carried out on an annual basis. This process includes the assessment of the following risks:

- Physical risks: water availability and quality, extreme weather events (such as droughts and flooding), water stress, interannual and seasonal variability of rainfall, among others.
- Regulatory risks: tariff changes, abstraction licences and discharges authorisations, regulation of river basins, among others.
- Other risks: impact on the supply chain, impact on habitats and ecosystems, social conflicts, improved water accessibility and sanitation and impact on other stakeholders.

In the process of identifying and assessing water-related risks, different variables of exposure are analysed and different tools are used, such as: i) tools to monitor consumption and discharges, ii) identification of consumptions in the supply chain, iii) maps of water risks provided by reference organisations, iv) tools for identifying legal requirements, v) procedures for social impact management, and vi) procedures for environmental management as well as the experience of the company's qualified staff.

Consumption of municipal, surface and groundwater in 2016

Country	Water consumption (m ³)
Spain**	3,972,621.15
USA**	420,644.56
Italy**	147,073
Brazil**	100,344.34
Canada**	93,840.71
South Africa*	71,778
Chile**	67,707.35
Mexico**	62,247.49
Ecuador and Galapagos Islands**	47,525.57
Qatar*	43,288
Poland*	26,272.37
Colombia**	16,476.34
Peru**	12,985.35
Australia**	9,159.46
Dominican Republic**	2,400
Nicaragua	2,288.88
Morocco*	1,867
Germany**	1,851.34
Panama**	1,350
India*	1,285.22
Portugal**	488.4
Costa Rica**	402
Gabon**	345
Andorra	270
Croatia	66
Turkey**	13.26

* Countries subject to water stress, according to the Global Water Tool of the World Business Council for Sustainable Development (less than 1,700 m³ fresh water available per year per person).

** Countries not subject to water stress, according to the Global Water Tool of the World Business Council for Sustainable Development (less than 1,700 m³ fresh water available per year per person).

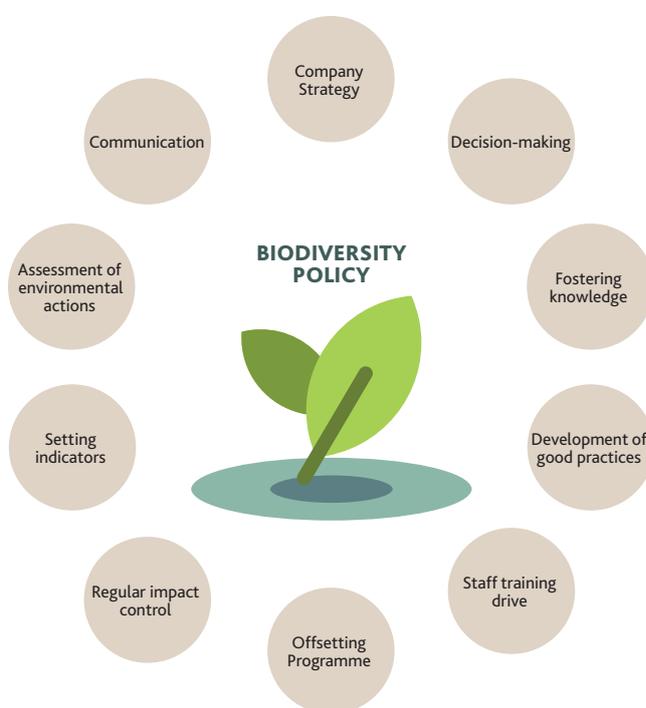
The main opportunities derived from the company's activity with regard to water resources are materialised through the ACCIONA Agua division. Nowadays, ACCIONA Agua takes its water purification, treatment and desalination solutions to areas of the world that suffer from major water deficiencies (see more information in the ACCIONA Infrastructure's Commitment chapter).

Environmental protection and biodiversity

In the meeting held during the tenth Conference of the Parties in 2010 in Japan, the Convention on Biological Diversity (CBD) approved the Strategic Plan for Biodiversity 2011-2020, with the aim of inspiring large-scale actions for all countries and stakeholders to safeguard biological diversity.

For ACCIONA, the conservation of biodiversity and the responsible use of natural heritage, as well as an ethical commitment, are necessary conditions for global sustainability. Since 2013, the company has a Biodiversity Policy in place, in which, through different principles, it promotes the valuation and conservation of biodiversity as a necessary means for economic development and social progress.

In each of the phases relating to the design, construction, operation and maintenance of its activities, ACCIONA identifies and assesses possible impacts on biodiversity in order to adequately manage these activities. Environmental monitoring plans are also established to control and implement preventive and corrective measures associated to the project.



PANEL OF ENVIRONMENT AND BIODIVERSITY EXPERTS

ACCIONA has a panel of environment and biodiversity experts that has been working with the company since 2011. This year, it has continued monitoring and analyzing the results of actions started in previous years that are included in the framework of the Biodiversity Offsetting and Improvement Programme. Furthermore, this panel has provided technical advice in the development of the first steps of the common assessment methodology of ACCIONA's Biodiversity Footprint, a goal of the SMP 2020.

Additionally, it has assessed environmental prevention and conservation actions carried out by ACCIONA in those countries where it operates.

MAIN ACTION LINES IN 2016

Biodiversity Offsetting and Improvement Programme

In 2012, the OECD estimated that climate change may become the main factor behind the loss of biodiversity in 2050. Aware of it, ACCIONA promotes an innovative programme that consists of designing and executing volunteering initiatives that go beyond administrative environmental requirements, whose aim is to improve the situation of specific threatened species and/or ecosystems. These actions promote biodiversity and social progress, and set ACCIONA apart on a global scale in terms of its effective commitment to sustainability.

Aware that its activities can affect biodiversity, ACCIONA identifies and assesses these possible effects

CREATION OF A NEW ECOSYSTEM - WETLAND - USING RENEWABLE ENERGIES

ACCIONA, in collaboration with the Foundation for Research in Ethology and Biodiversity (FIEB) proceeded in 2014 to the creation of a wetland with its associated bankside vegetation, with the aim of increasing the environmental richness and biodiversity of this area where water availability is a constraining factor for a significant number of animal and plant species.

The wetland area receive water from an existing aquifer, which is extracted using the energy generated by solar panels. From this area, it filters through to deep layers and returns to the aquifer, thus forming a closed ecological system. This initiative can be extrapolated to any area where there is a nearby source of water.

Throughout 2016, the system has been optimised, achieving a very permanent water layer even in the summer months, when there is very little rainfall and temperatures soar. Thanks to the continuous provision of water, a vegetation border is maintained around the wetland area, made up mainly of reeds and willows.

Ash trees and poplars have also been planted around it. The wetland area is visited frequently by different bird species, including mallards, grey herons, black-winged stilts and kentish plovers, among others. Also highlight the presence of are natterjack toads, perez's frogs and viperine water-snakes.

IMPROVEMENT OF BIODIVERSITY IN THE TERRITORY AND HABITAT OF THE BROWN BEAR

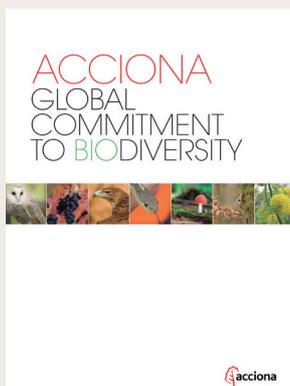
Continuing the project started in 2012 in collaboration with the Fundación Oso Pardo (Brown Bear Foundation), in 2016 ACCIONA carried out again actions to enrich the mountain areas of Palencia and Cantabria inhabited by brown bears, by planting fruit trees in one of the two remaining bear habitats in the Cantabrian Mountains, estimated to be home to a total of 40 bears, according to the last census carried out.

In 2016, a total of 5,500 fruit trees were planted, which together with those planted in previous years make a total of more than 20,000 trees of different species –cherry trees, apple trees, whitebeams, european black pines, alder buckthorns and rowans – distributed across several groves to cover a larger enriched territory.

Different scientific studies point out that the reproductive success and the survival of bear cubs seem to be linked to food, and therefore a greater diversity of food resources is crucial for their recovery. Thus, the availability of food – both in terms of variety and quantity – for brown bears, an endangered species, is improved.

These actions promote biodiversity and CO₂ absorption levels in Cantabria, while contributing to the recovery of one of the country's most symbolic animal species.

ACCIONA, GLOBAL COMMITMENT TO BIODIVERSITY



In its commitment to the principles established in its biodiversity policy, the company highlights and provides information on relevant conservation-related actions that it carries out in its lines of business, promoting and disseminating a culture of conservation of biodiversity and the environment. In this regard, it has published the

report *ACCIONA, Global Commitment to Biodiversity*, which presents some of the best and most interesting biodiversity practices connected to ACCIONA's activities, as well as actions that stand out within the company's Biodiversity Offsetting and Improvement Programme.

Best business practices in biodiversity linked to the development of ACCIONA's activity

ACCIONA, aware that its activities can affect biodiversity, identifies and assesses the nature of these possible effects in each of the phases of design, construction, operation and maintenance of its activities.

In all projects and activities, a preliminary analysis of the environment is conducted, considering the existence of protected areas, the presence of protected fauna and flora and proximity to water sources. Furthermore, environmental monitoring plans are established to control and implement preventative and corrective measures associated with the project (examples in the ACCIONA Energy's Commitment and ACCIONA Infrastructure's Commitment chapters).

INDICATORS OF BIODIVERSITY PERFORMANCE

Protected areas and non-protected areas with high biodiversity value

ACCIONA controls and monitors facilities that are adjacent or located in protected areas and non-protected areas of great value for biodiversity.

Location of facilities in areas of high biodiversity value

Line of business	No. of protected areas and non-protected areas of high biodiversity value	Area of the facilities in protected areas and non-protected areas of high biodiversity value (ha)	No. of adjacent protected areas and not protected areas of high biodiversity value
Energy*	176	505.21	1
Infrastructure	99	1,309.64	34
Construction	41	1,213.71	17
Water	41	48.27	17
Services	17	47.66	0
Other**	12	26.13	1
TOTAL	287	1,840.97	36

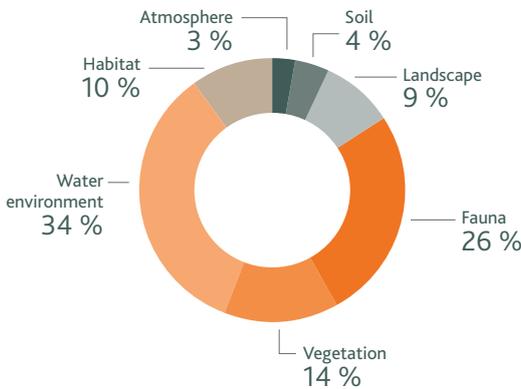
* Surface area of reservoirs is not included.

** Includes Grupo Bodegas Palacio 1894 and Trasmediterranea.

Identification and assessment of the most significant impacts

ACCIONA has facilities that are located in protected areas and non-protected areas of great value for biodiversity, or that are adjacent to them. In these locations, the most significant impacts for each of the facilities are identified and assessed.

Nature of impacts



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

Protected species

In the same way, ACCIONA identifies the species affected by the installations included on the Red List prepared by the International Union for Conservation of Nature (IUCN) or included in national catalogues.

The following table shows the number of species and their category of protection according to the Red List of the IUCN. Furthermore, it takes into account the species that are not included in this list but are protected by national catalogues, a total of 33 species.

Number of protected species affected by ACCIONA's facilities

Protection category	IUCN Red List	No. of species
CR	Critically endangered	1
EN	Endangered	3
VU	Vulnerable	10
NT	Near threatened	13
LC	Least concern	119
Other national catalogues		33
TOTAL		179

Restoration and protection of habitats

ACCIONA projects consider the prevention and restoration of areas that may be affected by the installations, and therefore these projects are associated to works of restoration and protection of habitats, such as revegetation, maintenance of forests and planting of affected areas.

En 2016, ACCIONA protected and restored 168 hectares in the areas surrounding its projects and, in almost all cases, the success of the measures carried out were verified by independent external professionals.

Water bodies affected significantly by water abstraction or discharges

ACCIONA requires water abstraction to carry out its activities, especially in the production of renewable electrical energy in hydroelectric plants, and to supply drinking water through its Drinking Water Treatment Plants (DWTPs) and in the execution of its works. Therefore, the company and the environmental administration establish prevention measures to minimise any impacts on species that may be present in river ecosystems, such as respect for the regime of environmental flows and the technical requirements established by the administration itself.

For more information, see chapters on Commitment of ACCIONA Energy and ACCIONA Infrastructure

Treatment of the main risks and opportunities associated with biodiversity

ACCIONA, aware that biodiversity is in itself a key natural property of high value, promotes its appreciation and conservation.

This year, the company has strengthened the treatment of the main environment and biodiversity-related risks and opportunities by approving a set of regulatory documentation, including the environmental responsibility procedure. This procedure, which covers every kind of facility or project for any country where the company operates, deepens on the risks that ACCIONA's activity may cause accidentally to the natural environment of any receiver. The procedure contemplates any defect of operation, maintenance, design, material, equipment, process or external factor in the analysis of risks to the environment, including biodiversity.

Facilities in protected areas and non-protected areas of high biodiversity value in 2016

Facility	Protected Area (PA) affected by the facilities	Geographic location
Maritime Transport (11)	NatP	Spain
Wind farm (45)	SIC, IBA, SPA, NatP, BR, NM,	Spain
Electricity line (7)	SIC, SPA, IBA	Spain
WWTP (12)	BR, SIC, SPA, NP	Spain
WWTP (1)	NP	Italy
Integral service (3)	SPA,SIC, NP, PR	Spain
Seawater desalination facility (6)	SPA, SCI, BR, NP, PL, Ramsar	Spain
Drinking water treatment plant (2)	SCI	Spain
Photovoltaic (2)	SCI, SPA	Spain
Pumping station (15)	NatP	Spain
Construction (2)	NR, SIC	Mexico
Construction (4)	NR	Spain
Linear infrastructure (roads) (2)	NR	Mexico
Linear infrastructure (roads) (12)	SAC, SIC, PL, SPA	Spain
Linear infrastructure (roads) (1)	PPA (PERMANENT PRESERVATION AREA)	Brazil
Linear infrastructure (tunnel) (3)	PL, SIC, SPA	Spain
Hydraulic Infrastructure (6)	SIC, SPA, SAC, HIC, NR	Spain
Road maintenance (3)	SPA, SIC	Spain
Linear infrastructure (roads) (1)	NR	Gabon
Habitat improvement (17)	SIC,NM, PL, SAC	Spain

Note: SAC: Special Area of Conservation; SIC : Site of Community Importance; SPA: Special Protection Area for birds; HIC: Habitat of Community Interest; BR: Biosphere Reserve; IBA: Important Bird and Biodiversity Area, NP: National Park, NatP: Natural Park; NM: Natural Monument; NR: Nature Reserve; PL: Protected Landscape.

Waste Management and Promotion of Circular Economy

With the aim of minimising waste generation and the use of natural resources, ACCIONA incorporates in its activities all methodologies, processes, technologies, and good practices relating to waste management, reuse and recycling.

Similarly, the company advocates the use of tools to assess its impact on the entire value chain and the selection of products and processes that most respect the environment.

WASTE MANAGEMENT PLAN 2016-2020 FOR THE PROMOTION OF CIRCULAR ECONOMY

This Plan is created under the framework of regulatory development at world level as regards the circular economy, which makes evident the need for action to achieve progress towards an economic model based on the production of goods and services, that reduces consumption and waste of raw materials, water and sources of energy.

The Plan covers the main types of waste dealt with at ACCIONA, and aims to establish a general strategy in the waste policy to promote a circular economy model within the organisation, to be implemented progressively based on pilot experiences. Objectives and methods are set in order to produce less waste in the company and reincorporate into the production chain the materials (and/or energy) contained therein, applying the circular economy criteria. In this approach, certain stages in the waste management hierarchy take on a leading role: prevention in generation, preparation for reuse, recycling and other kinds of waste recovery (including energy).

Non-hazardous waste which the Plan focuses on specifically are: debris, soil, dehydrated sludge, slag, ash, plant remains and pre-treatment waste. These types of waste amount to more than 99% of the weight of the waste generated. Also included are the two types of waste that account for around 80 % of hazardous waste: Marpol I waste (waste made up of hydrocarbons generated by ships) and contaminated soil.

Trends for main consumptions of resources by division

	Unit	2013	2014	2015	2016
Energy					
Biomass	t	389,752	-	336,589	343,212
Sulphuric acid	l	78,224	73,696	90,761	45,837
Sodium hydroxide	l	43,663	25,109	29,480	20,888
Sodium hypochlorite	l	80,203	51,375	42,883	46,376
Hydrochloric acid	l	79,609	56,858	62,689	59,368
HTF (Solar thermal)	kg	53,080	49,008	147,800	117,220
Infrastructure					
Construction					
Wood (total)	t	121,615	17,251	2,151	1,348
Certified wood (FSC or similar)	t	1,039	288	491	654
Soil reused from another project	m ³	934,014	858,448	484,163	618,612
Concrete and mortar	m ³	1,808,076	1,483,011	942,991	1,864,459
Cement	t	232,900	253,783	234,729	104,447
Aggregates and breakwaters (natural)	t	6,337,446	7,031,239	3,468,341	6,018,093
Aggregates from recycled material	t	469,752	394,783	73,217	20,542
Steel	t	291,406	188,610	678,755	283,213
Concessions					
Lubricants	kg	15	867	2,160	1,824
Paints	kg	48	19,982	2,527	19,318
Metals	kg	-	2,250	2,833	10,426
Water					
Sulphuric acid	m ³	141	307	1,446	3,099
Sodium hypochlorite	t	1,440	3,878	3,238	4,801
Polyelectrolyte	t	367	530	554	641
Calcium hydroxide	t	873	1,429	2,670	2,537
Carbon dioxide	t	566	3,431	3,769	4,469
Aluminium sulfate	t	1,463	1,719	585	704
Services					
Oils	l	37,123	44,189	42,153	31,528
Subsoil	kg	595,000	29,240	163,855	695,074
Chemical cleaning consumables	kg	26,489	262,334	292,346	183,290
Industrial					
Wiring	m	63,015	675,520	8,500	278,516
Pipes and ducts	m	3,552	-	-	56,857
Other businesses*					
Lubricants	l	705,208	613,672	710,978	927,696

*Includes Grupo Bodegas Palacio 1894 and Trasmediterranea.

REUSE AND RECYCLING OF GENERATED WASTE

ACCIONA promotes procedures and processes aimed to minimise, separate, reuse, recycle and recover waste. In addition to the measures and best practices that are already implemented, ACCIONA develops new innovative technologies in its research centres. Thus, of the 12,603,924 t of waste generated by the company (12,590,645 t of non-hazardous waste and 13,279 t of hazardous waste), a total of 4,706,003 t are recovered.

Management of waste*

	% Landfill			% Recycling			% Reuse		
	2014	2015	2016	2014	2015	2016	2014	2015	2016
Debris	62	72	75	15	25	20	23	3	5
Soil	60	59	63	0	0	4	40	41	33
Ash	0	0	0	100	100	100	0	0	0
Slag	0	0	0	100	100	100	0	0	0
Dehydrated sludge	28	19	15	8	7	26	64	74	59
Pre-treatment waste	-	60	93	-	38	2	-	2	6
Plant remains	-	-	5	-	-	23	-	-	72
Marpol I waste	-	-	0	-	-	100	-	-	0

* Percentages of the management calculated over the base of the waste generated, for which the management is known, that in 2016 were: 99 % debris, 98 % soil, 100 % ash; 100 % slag; 71 % dehydrated sludge; 54 % waste; 91 % plant remains y 100 % Marpol I waste.

LIFE CYCLE ANALYSIS

The Life Cycle Analysis (LCA) is a standardised methodology that is applied to evaluate the environmental impact of a process, product or service throughout its life, from the purchase of raw materials, to transport, construction and use until the end of its useful life.

Since 2016, ACCIONA has had a LCA portfolio that serves as a benchmark for using tools for evaluating the environmental sustainability of the company's actions and projects. The portfolio currently has 50 LCAs corresponding to 19 projects, into which the company's new actions will be incorporated as they take place.

Environmental sanctions and fines

During 2016, the company received 19 environmental fines and sanctions for a total value of 53,647 euros. Among the total amount for the sanctions closed in 2016, there are 3 exceeding 5,000 euros, for the amounts of 29,613 euros (ACCIONA Energy), 6,000 euros and 6,010 euros (ACCIONA Construction).