

environmental dimension

a. climate footprint

b. process efficiency and
management excellence

process efficiency and management excellence

2009 milestones

- Environmental Efficiency Plan implemented at work centres and first positive results obtained.
- Certified environmental quality and management systems consolidated.
- Revision and updating of ACCIONA's regulatory structure commenced, with a focus on integration.
- Improvement groups created and consolidated as a management tool focused on excellence and environmental efficiency.

2010 goals

- Implement second phase of the Environmental Efficiency Plan at production sites.
- Define ACCIONA's own model for calculating its carbon footprint, integrating energy, water, waste, biodiversity and other environmental aspects.
- Implement the Knowledge Management Plan, which seeks to facilitate efficient, sustainable creation and transfer of information, thereby improving the Company's bottom line.

Efficient, sustainable projects


ACCIONA's commitment to sustainability involves offering profitable products and services that contribute to social well-being while minimizing natural resource consumption. We focus on WHAT is being done, but we give equal importance as to HOW it is being done.

In this focus on sustainability, excellence and efficiency are the two basic pillars of the Company's management system. This innovative approach enables us to

successfully manage critical aspects of the Company's businesses, for example the social, environmental and market challenges it faces.

The objective is to find an economically viable alternative with a lower environmental impact and maximum process efficiency. This approach is underpinned by major expenditure on innovation and by a business model in which environmental protection is viewed as a critical vector for growth.

With respect to sustainability,
ACCIONA is not just
concerned about WHAT
is done, but takes great
responsibility for HOW it
is done



The new Innovation & Sustainability Department oversees regulation, sustainability, R&D&I, processes, quality and the environment



Commitment to excellence and sustainability in management

The Company's efforts to protect the environment are under the direct control of ACCIONA's Chairman, through the newly-created Innovation and Sustainability Department, which oversees regulation, sustainability, R&D and Innovation, processes, quality and the environment. ACCIONA aims to use the department to channel research, development innovation efforts and to oversee and promote its

excellence and corporate sustainability policies.

All ACCIONA companies have a unit in charge of environmental management, which reports to the corresponding division and is functionally dependent on the Processes, Quality and Environment Department.

Statement of quality and environmental policy

ACCIONA's business model is based on building, developing and managing infrastructure, energy and services with a focus on sustainability so as to contribute to social well-being and sustainable development.

This is put into practice through the fundamental values of social responsibility, respect for the environment, satisfaction from a job well done, the spirit of service, technical foundations, promoting innovation and compliance with legislation, and it is materialized through the following principles of action:

- Focus on **value creation and economic growth** based on returns and sustained profit, avoiding costs from defective work, delays and, generally, any activities that do not provide real added value.
- **Efficiency and excellence** in internal management, applying a **management system that integrates** economic, technical,

environmental and social aspects and, generally, any that contribute to SUSTAINABILITY, **based on each company's processes**, with a focus on the continuous improvement of our products and services, giving priority to initial planning and prevention to avoid subsequent corrections.

- Consideration of **environmental aspects** related to our activity in all its phases, end-to-end, to minimize the potential impact on the environment, by promoting the rational use of resources at all times.
- **Monitoring and oversight** of processes and activities on the basis of indicators, obtaining quantifiable information that contributes towards implementing actions that enhance our products, services and management processes.
- Encouraging **teamwork and participation at all levels** of the Company in planning and developing activities, and facilitating lifelong learning, so as to raise awareness of personal responsibility and commitment to the quality of one's own work.

■ Complying with **customer** requirements to ensure their satisfaction, understanding their needs and expectations, transmitting the idea that we are more than service providers - that we are participants in a common project - and always operating professionally, ethically and transparently.

- The **commitment to comply with the applicable regulations and legislation.**
- Collaboration with **suppliers**, building relationships based on trust, loyalty, transparency, mutual respect and reciprocity, increasing their involvement in aspects regarding the environment, quality and workplace health and safety in common processes.
- **Exchanging knowledge** and searching for **innovative solutions** in production and management processes.

Excellence in management

Excellence is a vital factor when it comes to defining ACCIONA's growth models.

To this end, one of its principal objectives is the alignment of its process management systems with the most rigorous international standards.

Those systems are verified by independent entities to ensure that the company is advancing on the path towards excellence.

% PRODUCTION CERTIFIED TO ISO 9001				
2009	2008	2007	2006	2005
82%*	85%	78%	76%	58%

% PRODUCTION CERTIFIED TO ISO 14001				
2009	2008	2007	2006	2005
79%*	80%	76%	76%	58%

* The decline in certified production in 2009 is attributable to the considerable increase in international revenues, particularly at ACCIONA Energy, whose system is not yet certified. ACCIONA is working intensely to obtain certification in all countries where it operates. One of the objectives of its Strategic Plan is for 100% of its activities to be certified to the ISO 9001 and ISO 14001 standards by 2013.

Knowing the degree of satisfaction of clients is necessary to ascertain the success factors in sustainable growth plans

NUMBER OF QUALITY AUDITS					
	2009	2008	2007	2006	2005
INTERNAL	402	512	518	405	305
EXTERNAL	29	36	38	62	54

Excellence in management has a direct impact on customer satisfaction and trust. ACCIONA believes in the importance of obtaining exhaustive information about its customers'

degree of satisfaction so as to seek out the success factors in its sustainable growth plans. In this vein, the highlight of 2009 was the improvement in the satisfaction index in all

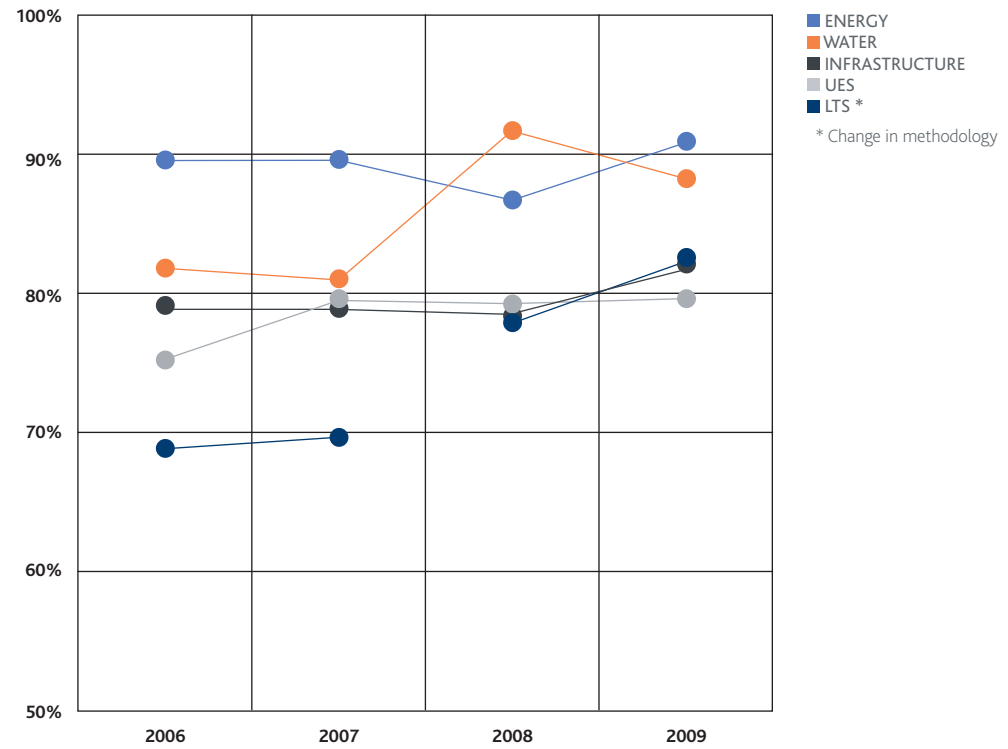
ENVIRONMENTAL AUDITS					
	2009	2008	2007	2006	2005
INTERNAL	372	441	423	397	273
EXTERNAL	38	42	45	49	38

business lines, with the exception of ACCIONA Agua where, although satisfaction in 2009 was eclipsed by 2008, the index has improved steadily since 2006.

Management excellence directly reflects upon customer satisfaction and confidence



Customer Satisfaction Levels



ACCIONA Trasmediterranea customer satisfaction levels

In 2009, Trasmediterranea customer satisfaction improved by five points, to 82%, while complaints were down 40% on 2008.

Measures implemented by ACCIONA to improve the quality of service have undoubtedly played a part in this improvement.

The "Plan to Improve Punctuality", which is part of the wider plan to reduce fuel emissions and consumption, was implemented in 2008 and places a major emphasis on meeting scheduled departure times; departure punctuality is a key factor in customer satisfaction.

Additionally, plans have been put in place with a view to continuous improvement in service quality, based on ongoing training of shore- and on-board personnel and the implementation of tools and systems for customers and passengers.

Activities in 2009 which were behind the very positive response by Trasmediterranea customers included: changes in the cargo system; installation of systems so that cargo clients can locate their goods at all times; implementation of a Centralized Customer Service Centre, and; ongoing improvements in the Quality Management System.

Clear objectives which demonstrate excellence and environmental performance

ACCIONA is committed to activities which support excellent development models that do not jeopardise natural resources or the environment.

ACCIONA's commitment to the environment and to excellence, which is reflected in its 2010-2013 Strategic Business Plan, is focused on three main areas: the Climate Change Plan, the Total Certification Plan, and Knowledge Management.

1. THE CLIMATE CHANGE PLAN

which was developed with a view to promoting the rational use of energy and water, saving resources and helping in the overall reduction of greenhouse gas emissions, has three main focuses:

- Defining and implementing a methodology for evaluating the carbon footprint of all of the Company's activities worldwide in terms of energy, water, waste and biodiversity, taking into consideration not only direct, but also indirect, effects (including suppliers).

- Implementing initiatives aimed at improving the Company's environmental efficiency. In this vein, the Company's 2008-2011 Environmental Efficiency Plan,

in force in all offices, will be extended to production centres between 2010 and 2013 with a view to:

- > Reducing our CO₂ emissions by 10%
- > Improving the energy and water consumption efficiency ratios by 10% in all activities
- > Increasing the recyclable and reusable waste that is separated at source, and reducing the volume of hazardous waste generated by 10%

- Reducing our CO₂ emissions: ACCIONA's goal for 2013 is to increase avoided emissions by more than 80% and improve the net emissions balance by more than 100%.

100% of Company activities are to be certified to the ISO 9001 & 14001 standards by 2013



2. THE TOTAL CERTIFICATION PLAN aims for all the Company's activities to be certified to the ISO 9001 and ISO 14001 standards by 2013. This Plan also seeks a shift by 2013 to more advanced management models, such as the EFQM (European Foundation for Quality Management) Model 2010.

3. KNOWLEDGE MANAGEMENT

is implemented through a set of policies, initiatives and actions aimed at creating and transferring information and knowledge with a view to improving results in a sustainable way. The overall knowledge management model was defined in 2009, and initiatives and projects have been identified for implementation in 2010-2013.

Its principal goals are:

- To identify ACCIONA's knowledge and the experts in each area.

- To develop strategies that provide people with the knowledge acquired by the Company.
- To establish new forms of collaboration between people and teams in the same business area, in different areas and in different countries.
- To provide people with new tools to manage the information and documentation created in each process, with an added goal of achieving a "zero paper" work environment.

Improvement objectives by business line

ACCIONA Infrastructure

- Develop and implement two improvement projects in the organization.
- Utilize an Environmental Efficiency Plan, to be implemented as follows:
 - > Develop a specific environmental efficiency plan for projects.
 - > Each project must obtain approval from the customer for at least one environmental improvement proposal, within the target time-frame, provided that it does not negatively affect the project's economic result.
- Complete implementation of the ISO 9001 and ISO 14001 management systems in 2009-2010 in: Brazil, Chile, Canada and Mexico.

ACCIONA Agua

- Optimize energy consumption in water treatment plants.
- Reduce nitrogen concentration of treated water.
- Reduce the average concentration of nitrates in effluent.
- Maintain the daily concentration of total suspended solids in the mixed liquor of the biological reactor/treatment.

- Reduce boron concentration in output water.
- Reduce conductivity of output water.
- Improve water outflow parameters beyond the design, contractual or legal requirements.
- Reduce contaminated packaging waste, contaminated rags and used oil production.
- Implement a predictive maintenance methodology.
- Optimize and improve supply network performance.
- Reduce paper consumption and increase paper recycling.
- Increase the reuse percentage of excavated soil.
- Implement an environmental efficiency plan applicable to offices.

ACCIONA Energy

- Implement the Métrica environmental data compilation tool in other countries.
- Improve environmental management at offices, in line with the Environmental Efficiency Plan.
- Optimize wind farm layout, taking account of noise maps.

- Evaluate the rate of bird collision with wind generators.
- Evaluate bird flight patterns in the environs of wind farms.
- Reduce ACCIONA Windpower's energy consumption by 2% in each category of consumption.
- Reduce hazardous waste production at ACCIONA Windpower by 10%.
- Analyze the production of non-hazardous lumber waste.
- Provide in-house training in environmental issues to 100% of staff at offices and 60% of field staff at ACCIONA Solar Energy.
- Certify ACCIONA Solar Energy's Integrated Management System and adapt it to international expansion.
- Assess ACCIONA Solar Energy's environmental footprint.

ACCIONA Real Estate

- Define country-specific environmental management procedures in at least two countries outside Spain: Mexico and Poland.
- Exhaustively assess and track the objectives established by the corporate Environmental Efficiency Plan.

- Implement new sustainability measures in Mexico and Poland.
- Draw up quantitative reports on the costs and depreciation of sustainability measures at completed real estate developments.

ACCIONA Trasmediterranea

- Apply the quality management system at the Tangier and Nador offices.
- Reduce bunker fuel consumption by 5% with respect to the first half of 2008.
- Apply and implement the corporate Environmental Efficiency Plan among ACCIONA Trasmediterranea employees.
- Optimize and improve management of Marpol I and Marpol V waste and other hazardous waste produced onboard ship.
- Complete a statistical analysis of ACCIONA Trasmediterranea's main indicators using the data compiled by Métrica Ambiental.
- Expand the system of sorting waste at source to include all ships putting in at Almería.

IMPROVEMENT GROUPS

The need to establish improvement groups arose from the self-assessment of management systems conducted by the Company in 2007 with the goal of identifying and implementing actions to improve process efficiency. A number of actions were planned in 2008 and implemented in 2009, and goals were set with regard to forming improvement groups at corporate level and in the business lines in order to develop systematic continuous improvement projects.

Group formation commenced with a training session for "Improvement Group Facilitators" with the goal of promoting dynamic, proactive participation by each project's participants. This training session was attended by 45 people, most of them quality and environment managers and coordinators in the various divisions.

As a result, improvement groups are now operational in: ACCIONA Infrastructure, ACCIONA Agua and ACCIONA Energy.

The role of improvement groups in ACCIONA

ACCIONA ENERGY

1. Definition and validation of technical specifications on oversight and tracking in evaluating project status.
2. Definition of process notes and identification of relevant indicators for assessing performance.
3. Definition of relevant facility operation processes under the new organizational structure.
4. Revision of indicators and selection of the most representative ones for defining the operations scorecard.
5. Analysis and resolution of relevant problems in operations in Spain so as to identify best practices and standardize them for dissemination and implementation internationally.
6. Identification of best practices in the area of Quality, Safety and the Environment, for implementation at all Group companies.
7. Provision of technical assistance to ACCIONA Energy North America in defining, developing

and implementing an Integrated Management System (quality, safety and the environment).

8. Review and improve the International Handbook containing all the organization's processes.
9. Study for implementation of a new method of using the intranet, oriented towards internal clients, for system procedures and instructions.

ACCIONA INFRASTRUCTURE

1. Improvement in project support processes.
2. Document management and archiving on completion of projects.
3. System for compiling actions of interest for knowledge management.

ACCIONA AGUA

1. Practical problem-solving methodology, applied on a pilot basis to the Quality and Environment Department.

LEED Gold certification for the Royal Jubilee Hospital Patient Care Centre (Victoria, British Columbia, Canada)

LEED (Leadership in Energy and Environmental Design) certification is a system for rating buildings that encourages the adoption of sustainable practices. It is the benchmark for the design, construction and maintenance of high-performance green buildings. LEED certification is given to buildings that meet specific criteria, points being awarded for compliance with established scales in six different categories:

- Sustainable sites: minimizing loss of stormwater, fostering combined car/bicycle use, and increasing urban density and green areas.
- Water efficiency: reducing water consumption and minimizing or treating waste water.
- Energy and atmosphere: reducing building energy consumption, using

renewable energies, and eliminating products that destroy the ozone layer.

- Materials and resources: reducing waste production in construction, reusing structural elements, using recycled materials and renewable construction materials, and designing and building more lasting buildings.
- Indoor environmental quality: use of daylight, use of low-emitting materials, establishment of threshold indoor air quality levels, contributing to occupants' comfort and welfare.
- Innovation and design process: exceeding the requirements for LEED certification and inclusion of environmental characteristics not covered elsewhere.

ISL Health, a consortium headed by ACCIONA, obtained a 30-year concession to design, build, finance and maintain the

500-bed Royal Jubilee Hospital in Victoria, British Columbia (Canada).

Client specifications required LEED Gold certification (i.e. a minimum of 39 points on the LEED scale). The project, which is under construction, has obtained 40 points and is expected to attain a higher score upon completion.

That score was achieved in the construction phase by using locally-sourced materials to reduce shipping distances, as well as promoting the use of recycled materials and separating and reusing waste so as to minimize waste production.

There are plans for controlling air quality on site and for controlling sedimentation and erosion in the project environs.

Environmental Efficiency Plan

The Environmental Efficiency Plan is the main tool for coordinating all environmental improvement initiatives with a view to improving the Company's efficiency ratios.

The plan is being implemented on the basis of goals to be attained in 2012. The first phase (2008-2011) includes efficiency measures mainly at the Company's office buildings. The second phase (2010-2012) begins in 2010 with efficiency measures at all sites, in Spain and other countries.

Métrica, the centralised tool for compiling environmental data, contributed to the launch by providing exhaustive monitoring of goal attainment, making it possible to compare efficiency levels between months.


The objectives of the first phase, which includes all ACCIONA offices, are as follows:

Objectives for the 2008-2011 period at ACCIONA offices

ENERGY	WATER	WASTE
<ul style="list-style-type: none"> ■ Improve energy efficiency ratio by 10%. 	<ul style="list-style-type: none"> ■ Improve water consumption efficiency ratio by 10%. 	<ul style="list-style-type: none"> ■ Increase the volume of waste destined for recycling. ■ Increase by 10% the volume of paper destined for recycling. ■ Reduce by 10% the volume of hazardous waste generated.

The Plan is the tool by which all environmental improvement initiatives are coordinated

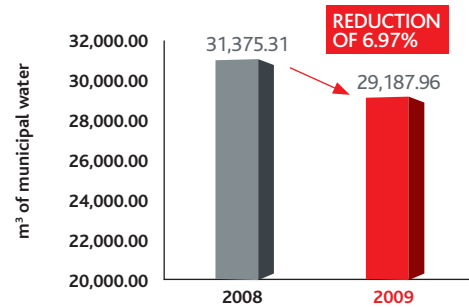
**Objectives set for
waste produced in
offices already have
specific measures for
each business line**



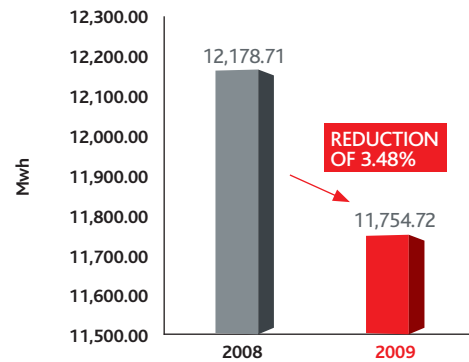
Measures to improve efficiency have been implemented at all offices, but data can only be compiled from offices where it is possible to measure consumption.

Employee awareness-raising, commitment by building maintenance crews and involvement by general services staff to adapt facilities to working timetables all contributed notably to the results obtained during the year.

Water consumption at offices (m³)



Electricity consumption at offices (Mwh)



The goals established for waste production at offices now have specific metrics for application in each business line. Full data will be compiled in 2010, making it possible to measure efficiency.

Reducing CO₂ in ACCIONA centres

One of the major environmental objectives for 2010 is the implementation of the Work Centre Efficiency Plan. To this end, the corporate Processes, Quality and Environment Department, with the site Quality and Environment managers, is designing a specific plan for each site that defines all of the measures to be implemented. This includes planning, projected reductions in CO₂ emissions, budgets, and estimated ROI.

These goals are aligned with those set out in the strategic plan, to achieve the following:

- Reduce our CO₂ emissions by 10%.
- Improve the energy efficiency and water consumption ratios in our operations by 10%.
- Increase CO₂ emissions avoided by over 80%.
- Improve the net emissions balance by 100%.
- Increase waste separation for recycling and reuse, and reduce hazardous waste production by 10%.

Métrica allows reliable, rigorous and flexible reporting to identify anomalies and define improvement actions for all processes



Improving environmental reporting by consolidating Métrica

Since its implementation in 2007, Métrica is the benchmark, centralized tool for monitoring and tracking the environmental performance of all of ACCIONA's activities.

Métrica provides for reliable, rigorous and flexible environmental reporting oriented towards identifying anomalies, setting goals and defining improvement actions in all the Company's processes.

The main outcome of implementing Métrica is the involvement of staff at production sites in both using the application as a tool and in identifying ways for it to work better.

This is evidenced by the fact that 96% of production sites in the business lines used Métrica to report their information in 2009. That figure refers to production sites in all of ACCIONA's business lines.

The scope of Métrica implementation was expanded by including ACCIONA Installations sites. Also, in 2009, Métrica was introduced at all of ACCIONA Energy's international sites, which extended its international coverage.

Functionally, the process of information compilation and drafting was made more flexible in 2009 by establishing a monthly cycle, required to implement the Environmental Efficiency Plan. All the information reporting fields were updated to adapt to each site's particular features.

Environmental awareness-raising and training

The active involvement of all ACCIONA employees is required to attain the environmental goals. To that end, the Company seeks maximum commitment from employees by developing innovative continuous improvement plans. ACCIONA provides training at each divisional headquarters and at employees' workplaces. A total of 6,368 hours of environmental training were given in 2009 at the central offices alone.

The Company's risk map takes into account the impact of environmental events on corporate image



Environmental risks under control

One of the objectives of the environmental management systems implemented in each business line is to identify potential environmental risks derived from company activity, under both normal and emergency conditions. Treatment of environmental risk is defined by each business line within the corporate environmental policy framework and the established environmental management system. Once identified, environmental risks are monitored periodically with a view to avoiding impacts.

In 2009, as part of ACCIONA's risk map framework, a risk management system was developed in which environmental risks are identified as "fortuitous risks". The Company's risk map also includes environmental events which impact the corporate image and have financial consequences, and an additional

criterion was added in 2009: negative impact on sustainability and development.

In Spain, Act 26/2007 on Environmental Liability requires companies which undertake certain activities (apart from exemptions) to provide financial guarantees to cover the environmental liability inherent in certain activities.

In 2008, ACCIONA was already compliant with this law, having arranged an environmental liability insurance policy to cover the environmental responsibility inherent in certain potentially dangerous activities. That policy remained in force in 2009; it insures all of the Company's activities against potential risk situations that may arise.

Since the amount of the financial guarantee is established in accordance with an evaluation of repair costs in the event of possible damage, the Act provides for the possibility of using different tools to analyze environmental risks and calculate the guarantee, e.g. models for reporting environmental risk type, industry guides and standard tables. As a member of the Environmental Committee of SEOPAN, ACCIONA Infrastructure is working on the development of one of these tools to facilitate construction sector compliance with the Regulation issued under the Act.

The legal requirements in relation to the environment are fulfilled in all of the Company's centres and reviewed periodically with a view to ensuring compliance.

Successful environmental risk-management is key to global expansion

Risk management, from the bidding to the execution phase, is a key process implemented at ACCIONA Infrastructure's largest international projects.

This establishes a rigorous process of approaches and decision-making based on a risk and opportunity analysis, with a view to more preventive and less reactive management.

The process includes the identification, analysis, evaluation and treatment of all risks of any type that may arise in a project.

Environmental risks are one of the most important aspects of this process. Following analysis and evaluation, the appropriate strategies are defined to prevent or mitigate the most significant environmental risks, with a periodic follow-up on the efficacy of the preventive actions established.

Participation in external forums

ACCIONA's business lines participate in external forums and workgroups to share experiences and search for innovative solutions in environmental protection.

ACCIONA aims to share its principles of sustainability and excellence in the area of environmental protection with society at large and with other companies. ACCIONA actively participates in the following forums and workgroups:

- *Fundación Entorno*. Workgroup on energy and climate change. CO₂ Action Project. Workgroup on Sustainable Building.
- Committee for Quality and the Environment, SEOPAN (Construction sector observatory) and TECNIBERIA (Spanish Association of Engineering, Consulting and Technology Services Companies).
- *Club Excelencia en Gestión*. Participation in Forum on Excellence and Forum on Innovation.
- *Asociación Española para la Calidad*. Participation in the Construction, Services and Environment Committees.
- AENOR advisory board for the certification of construction companies.
- AEN/TN 198 Committee, "Sustainability in Construction".

ACCIONA Real Estate's sustainable approach in Poland recognized by European Medal

ACCIONA Real Estate has been awarded the European Medal in Poland for landscape integration and eco-efficiency in the construction of its real estate development in Lesne. The European Medal is granted by Poland's Business Center Club and is sponsored by the European Economic and Social Committee and the Office of the Polish Committee for European Integration. The Lesne development, near Bemowo Park in Warsaw, received the Medal in

recognition of its architecture, which is perfectly integrated with the landscape, and the eco-efficient standards to which it was built.

Construction of the residential development (247 homes) commenced in 2007. Eco-efficiency factors included in the development provide considerable energy and water savings, benefit the environment and reduce costs for home-owners.

Eco-efficient criteria save energy and water, bring environmental benefits and reduce costs



Breaches and penalties

In the last year, 25 disciplinary proceedings were commenced against ACCIONA Infrastructure for environmental incidents and breaches. Of those, 23 are still pending and two were resolved after paying a fine of 6,010.13 euros. As regards international activity, a disciplinary proceeding commenced in 2009 in Brazil regarding impact on vegetation; it is currently in the plea phase.

Three new disciplinary proceedings were begun against ACCIONA Agua in 2009 related to activities in Spain, primarily discharges outside the regulated parameters. The cases are currently in the plea phase.

Four disciplinary proceedings commenced against ACCIONA Trasmediterranea by the Port Authorities of Almería and Vigo (both in Spain) due to breaches related to waste management and inadequate maintenance of

machinery. The cases are also currently in the plea phase.

Three disciplinary hearings started against ACCIONA Energy in Spain and one in Korea, the latter due to occupation of domain waters and impacts on vegetation. One of the two issues was resolved during the year with a fine of 137,501.57 euros; the rest of the cases are in the plea phase.

The SILENV project to reduce noise pollution and vibrations from ships

SILENV stands for **S**hips-oriented **I**nnovative **s**oLutions to **r**EDuce **N**oise & **V**ibrations. The project's final goal is to obtain a **"green label"**, which will include recommended levels of noise and vibrations as well as the related design guidelines.

A consortium of 15 companies is participating in the project: DCNS (FR), University of Genoa (IT), TSI (ES), SSPA (SE), CETENA (IT), ACCIONA Trasmediterranea, Bureau VERITAS (FR), CEHIPAR (ES), HTP-TUV (BG), INSEAN (IT), TNO (NL), University of Glasgow (UK), VTT (FI), and UPC Polytechnic University of Catalonia (ES).

ACCIONA Trasmediterranea is the consortium's only shipping company; it will be the "end-user".

Analysis of experimental data from the most common types of vessels will be used to identify the most important sources of noise and vibration. A list of the most innovative solutions will be drafted, all of which will be evaluated in economic and technical terms. The solutions will be tested and adjusted virtually using numerical models, paving the way for improvements in noise and vibration levels.

Our aim is to obtain a
"green label" stating
recommended noise
and vibration levels



Environmental investment by ACCIONA in 2009 rose to **8.7 million euros**

Environmental expenditure

ACCIONA's environmental expenditure in 2009 amounted to 8.7 million euros and covered the following activities:

- Laboratory tests and trials.
- Non-hazardous waste management.
- Hazardous waste management and removal.
- Treatment of discharges into water courses.
- Environmental management.
- Emission prevention.
- Landscape restoration.
- Implementation of corrective measures.

hundreds of euros)			
2009	2008	2007	2006
8,687	11,635	10,475	10,269

In 2009, ACCIONA's business lines spent 3.3 million euros acquiring property, plant and equipment and improving facilities and machinery used specifically for protecting and bettering the environment.

PROTECTION AND PRESERVATION OF BIODIVERSITY

Biodiversity preservation is a key issue in the development of sustainable activities. Biodiversity includes species and their populations as well as ecosystems and their physical components.

Biodiversity preservation is a key issue in ACCIONA's decision-making process, which includes prior evaluation of the real and potential environmental impact of new activities, products and services, from the design phase to implementation.

The Climate Change Plan, which is part of the Company's 2010-2013 Strategic Plan,

includes specific activities and projects related to biodiversity preservation with a view to maximum prevention and reduction of potential impacts on species and ecosystems, from their inclusion in our carbon footprint calculation to environmental efficiency and management measures. These activities and projects pursue the following goals:

- **Complete integration** of biodiversity preservation principles in the Company's strategy so that they are taken into consideration during the decision-making process for projects in the business lines.
- **Application** of a preventive approach to minimize new projects' impact on biodiversity

throughout their life-cycle (i.e. implementation, operation, decommissioning) and in Environmental Impact Evaluations.

- **Establishment** of biodiversity-related indicators and objectives which will be controlled, monitored and even audited.
- **Communication** of the Company's biodiversity-related activities with a view to raising awareness.
- **Training** of Company personnel on biodiversity.
- **Cooperation** in research, preservation, education and awareness-raising projects with stakeholders, governments, etc.

Development and implementation of systems to control and monitor birdlife at wind farms

In 2009, experiments got underway at wind farms to closely analyze affected birdlife and study the possibility of implementing measures to reduce the impact of wind turbine generators.

The actions underway include:

- Daily wind farm monitoring via on-site personnel to detect and reduce bird

collision risk through sporadic machinery shutdowns.

- Use of radars to monitor bird migration at wind farms and thereby plan periodic shutdowns to avoid collisions.

- Painting of blades to improve visibility for birds and reduce collisions.

- Installation of an experimental video and sound system to frighten away

birds that come too close to the wind generators.

- Experimental design of an ultrasound emission machine to scare bats away from wind generators.

- Installation of bat detectors at hub height to obtain information about the species and flight in the risk area.

Annex: environmental performance indicators

The diversity of ACCIONA's activities makes it a very complex company, with a broad range of environmental processes and profiles, and measurements adapted to each of its business lines.


In many cases, the amount of resources used or waste produced does not depend on internal management by the work centre or division but, rather, on the nature of the activity. Construction is a good example: its typology, methods and design - which do not depend on internal management in most cases - determine resource use and waste

production. Other examples include water treatment plants, where the characteristics of the untreated water determine the processes to be implemented, and infrastructure maintenance is affected by location and climate conditions, among other factors.

With a view to standardizing performance data, ACCIONA uses the following ratio: consumption/revenue (thousands of euros).

ACCIONA's energy consumption is analyzed in the "Climate Footprint" chapter of this report.

The amount of resources used or waste produced does not depend so much on the internal management of the centre as the nature of the activity itself



Consumption of materials

Responsible resource consumption and effective waste management are key objectives for ACCIONA. The Company consumes resources in its activities, mainly materials used in the different divisions.

For this reason, the development of eco-efficient services and products is a growth driver in all the Company's activities and is always considered to be part of ACCIONA's innovation and development efforts,

providing value to the Company as a whole. As such, the ratios of the efficiency of material consumption to main economic value evolved in a generally favourable form in 2009.

ACCIONA INFRASTRUCTURE							
RESOURCE CONSUMPTION		2009		2008		2007	
		INFRASTRUCTURE TOTAL	EFFICIENCY	INFRASTRUCTURE TOTAL	EFFICIENCY	INFRASTRUCTURE, SPAIN	EFFICIENCY
TIMBER	kg	5,997,083	1.66	6,347,886	1.77	5,137,213	1.868
LUBRICANTS	kg	113,738	0.03	112,811	0.03	138,944	0.051
FORM RELEASE AGENTS	litres	176,669	0.05	117,798	0.03	246,451	0.09
CONCRETE AND MORTAR	m ³	3,463,741	0.96	2,204,889	0.61	1,847,627	0.672
CERTIFIED TIMBER (FSC OR SIMILAR)	t	328	0.0001	405	0.0001		
CEMENT	t	381,980	0.11	190,451	0.05	142,558	0.052
AGGREGATE AND ROCKFILL (NATURAL)	t	11,422,630	3.16	6,784,493	1.89		
RECYCLED AGGREGATE	t	184,286	0.05	729,796	0.20	4,548,344	1.654
STEEL	t	237,693	0.07	443,588	0.12	192,895	0.07

2007 figures only include data from ACCIONA Infrastructure projects in Spain

In 2008, the scope was expanded to include ACCIONA Infrastructure projects in Brazil, Gabon, Chile, Mexico, Venezuela and Canada.

2009 figures include data from Mostostal Warszawa (Poland).

Efficiency ratio: consumption/revenue (thousands of euros). The lower the ratio, the higher the efficiency of material use.

ACCIONA INFRASTRUCTURE MAINTENANCE					
		2009		2008	
		CONSUMPTION	EFFICIENCY	CONSUMPTION	EFFICIENCY
CONCRETE AND MORTAR	m ³	1,832.39	0.06	2,153	0.083
PLANT HEALTH PRODUCTS	kg	2,320.52	0.08	2,778	0.107
PAINT	kg	4,638.43	0.16	3,557	0.136
LUBRICANTS	l	1,395.96	0.05	3,095	0.119
CHEMICAL CLEANING CONSUMABLES	kg	919.50	0.03	1,120	0.043
NON-CHEMICAL CLEANING CONSUMABLES	kg	2,660.84	0.09	3,262	0.125

(*) No data for 2007. From 2008, the scope of the certification system was expanded to include all maintenance centres and data collection began.

Efficiency ratio: consumption/revenue (thousands of euros).

ACCIONA INSTALLATIONS			
		2009	
		CONSUMPTION	EFFICIENCY
PAINT	kg	2,320	0.04
WIRING	linear metres	549,201	9.3
REINFORCING STEEL	t	5,129	0.09
STRUCTURAL STEEL	t	5,557	0.09
PHOTOVOLTAIC MODULES	units	1,288	0.02

(*) No data for 2008. In 2009, the scope of data collection was modified to include this division.

Efficiency ratio: consumption/revenue (thousands of euros).

ACCIONA ENERGY							
		2009		2008		2007	
		CONSUMPTION	EFFICIENCY	CONSUMPTION	EFFICIENCY	CONSUMPTION	EFFICIENCY
BIOMASS (COGENERATION AND BIOMASS)	t	147,871	0.12	120,143	0.07	116,400	0.106
METHANOL (BIOFUEL)	t	3,877	0.0031	788	0.0004	3,330	0.003
VEGETABLE OIL (BIOFUEL)	t	2,094	0.0017	6,006	0.003	30,928	0.028
STEEL	t	11,870	0.01	86,630	0.048	65,934	0.059
SODIUM HYDROXIDE	l	118,610	0.10	126,872	0.07	94,903	0.087
SODIUM HYPOCHLORITE	kg	33,991	0.03	20,416	0.011	33,567	0.031
HYDROCHLORIC ACID	l	756,964	0.61	170,036	0.094	216,002	0.198
PHOSPHORIC ACID	l	356,697	0.29	25,239	0.01	51,786	0.047
OIL	l	232,456	0.19	254,370	0.141	152,145	0.139

2009 data includes wind farms in South Korea, Australia, the US and Mexico.

Efficiency ratio: consumption/revenue (thousands of euros).

ACCIONA AGUA							
		2009		2008		2007	
		CONSUMPTION	EFFICIENCY	CONSUMPTION	EFFICIENCY	CONSUMPTION	EFFICIENCY
SULPHURIC ACID	l	1,703,236	3.89	990,727	2.68	462,029	1.68
SODIUM HYDROXIDE	l	376,936	0.86	248,303	0.67	128,971	0.47
SODIUM BISULPHITE	l	59,496	0.14	181,602	0.49	176,373	0.64
SODIUM HYPOCHLORITE	kg	1,486,959	3.39	1,585,280	4.29	938,777	3.41
POLYELECTROLYTES	kg	136,652	0.31	229,073	0.62	256,660	0.93
CALCIUM HYDROXIDE	kg	1,485,255	3.39	2,104,802	5.70	2,096,446	7.62
CARBON DIOXIDE	kg	1,395,892	3.19	829,506	2.24	707,575	2.57
PHOSPHORIC ACID	l	24,510	0.06	22,864	0.06	6,744	0.02
ALUMINIUM SULPHATE	kg	507,170	1.16	640,337	1.73	749,728	2.73
SCALE INHIBITORS	kg	17,448	0.04	45,579	0.12	422,28	0.15
ACTIVATED CARBON	kg	8,202	0.02	37,167	0.10	30,438	0.11

Efficiency ratio: consumption/revenue (thousands of euros).

Installation of reverse osmosis equipment to use osmotized water in preparing polyelectrolytes and improving sludge dehydration processes

Wastewater treatment plants (WWTPs) aim for high purification performance while producing waste (dehydrated sludge) that is as dry as possible. WWTPs generally use recycled water in polymer preparation; however, impurities in recycled water may have a negative impact on the components of the polymer, reducing its binding power.

Following numerous tests at labs and the Archena treatment plant, it was confirmed that the procedure using osmotized water offers significant advantages compared with treated or drinking water in technical,

economic and ecological terms (lower sludge production and reagent and energy consumption).

The technical advantages to preparing the polymer with osmotized water compared with treated or drinking water are:

- Increased dryness of dehydrated sludge.
- Increase in admissible input in the dehydration machinery.
- Reduction in specific polymer consumption.
- Less degradation of the prepared solution,

with the consequent reduction in solids in drainage water.

- Increase in overall retention of solids by dehydration machinery.

Additionally, overall dehydration costs have declined by more than 12%.

In 2009, ACCIONA Agua and ESAMUR, the Murcia government's sewage network operator, installed a reverse osmosis machine at the wastewater treatment plant in Archena. The investment is expected to be recouped in 15 months.

ACCIONA LOGISTICS & TRANSPORT SERVICES							
		2009		2008		2007	
		CONSUMPTION	EFFICIENCY	CONSUMPTION	EFFICIENCY	CONSUMPTION	EFFICIENCY
LUBRICANTS	kg	1,222,336	2.25	1,899,933	3.97	1,745,630	3.97
PAPER	kg	7,785	0.01	2,537	0.005	83,226	0.189

Efficiency ratio: consumption/revenue (thousands of euros).

ACCIONA URBAN & ENVIRONMENTAL SERVICES				
		2009	2008	2007
OILS	CONSUMPTION (litres)	10,822	17,455	--
	EFFICIENCY	0.29	0.346	--
LUBRICANTS	CONSUMPTION (kg)	2,055	6,287	--
	EFFICIENCY	0.06	0.125	--
NON-CHEMICAL CLEANING CONSUMABLES (*)	CONSUMPTION (kg)	907,536	765,839	693,941
	EFFICIENCY	4	4.677	3.346
CHEMICAL CLEANING CONSUMABLES (*)	CONSUMPTION (kg)	1,293,078	1,565,691	1,720,000
	EFFICIENCY	5	9.562	8.293

Includes data from ACCIONA Urban Services and ACCIONA Facility Services.

Efficiency ratio: consumption/revenue (thousands of euros).

WINERIES							
		2009		2008		2007	
		CONSUMPTION	EFFICIENCY	CONSUMPTION	EFFICIENCY	CONSUMPTION	EFFICIENCY
GRAPES (OWN VINEYARDS)	t	3,337.92	0.09	3,652	0.077	3,632	0.074
GLASS	t	7,384.74	0.20	10,398	0.219	8,055	0.163
SODIUM HYDROXIDE	l	6,495	0.17	673	0.014	1,434	0.029
LUBRICANTS	t	0.14	0.00	2.15	0.045	1.7	0.035
PHOSPHORIC ACID	l	1,855	0.05	84	0.002	3,646	0.074
PLANT HEALTH PRODUCTS	t	13.64	0.0004	25	0.0005	37.6	0.764

Efficiency ratio: consumption/revenue (thousands of euros).

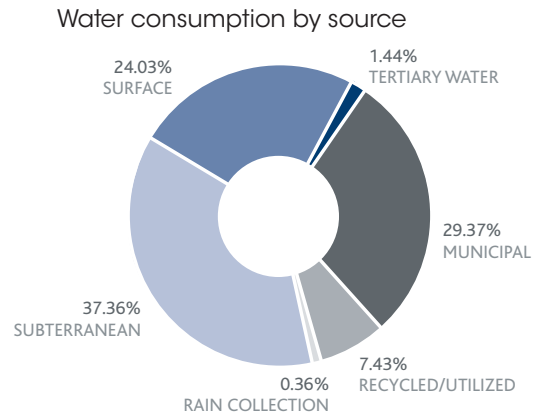
Water consumption

Water used by ACCIONA comes primarily from aquifers, surface water courses and municipal supply networks.

	TERTIARY SOURCES (m ³)	MUNICIPAL (m ³)	RECYCLED/ REUSED (m ³)	RAINWATER (m ³)	GROUND WATER (m ³)	SURFACE WATER (m ³)	TOTAL
INFRASTRUCTURE	32,614.92	395,941.50	92,652.42	10,831.90	250,997.30	507,682.32	1,290,720.36
WATER	10,950	60,597.38	118,808		20	34	190,409.38
ENERGY	143.05	338,301.62	14,388.28	217.29	326,125.50	189,576.48	868,752.21
HIJOS DE A. BARCELÓ		11,359			556,128		567,487
FACILITIES		396.60					396.60
MAINTENANCE OF INFRASTRUCTURE		3,673.59			1,170		4,843.59
URBAN & ENVIRONMENTAL SERVICES	154.15	82,033.58	5.33		1,948	33,674.77	117,815.83
TRASMEDITERRANEA		934.80					934.80
TOTAL 2009	43,862	893,238	225,854	11,049	1,136,388	730,967	3,041,359
RATIO 2009							0.48

* ACCIONA Energy's biomass and cogeneration plans utilized 27,517,328.8 m³ of water for cooling, which were not included in water consumption data since they were used solely for the thermal gradient.

RATIO: total water consumption/ACCIONA revenue in thousands of euros (excluding ACCIONA Real Estate).



Osmosis plant on Sorolla ferry

The Sorolla superferry is equipped with a reverse osmosis plant for obtaining fresh water from seawater. The plant generates between 2.5 and 3 t/hr of freshwater, meeting all the ship's needs in terms of human and machine consumption. Since it produces its own water, the ship does not need to take on water in port, with the consequent savings in resources in addition to economic and operating advantages.

By producing its own water, the Sorolla ferry avoids land supplies, thus saving resources



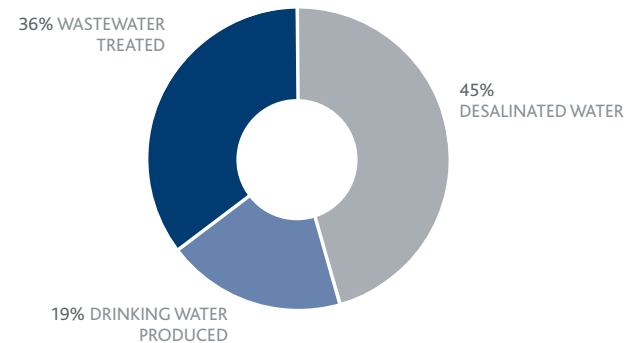
Water managed by ACCIONA

ACCIONA AGUA, WATER MANAGED (hm ³)			
	2009	2008	2007
DESALINATED WATER (hm ³)	112	48.50	52.86
DRINKING WATER PRODUCED (hm ³)	47.40	46.44	49.73
TREATED WASTEWATER (hm ³)	87.56	131.67	203.85
TOTAL	246.96	226.61	306.44

Desalination data for 2009 includes the plants in Tampa (US) and Talara (Peru).

Desalinated water produced by ACCIONA in Spain meets more than **1.7%** of supply network demand

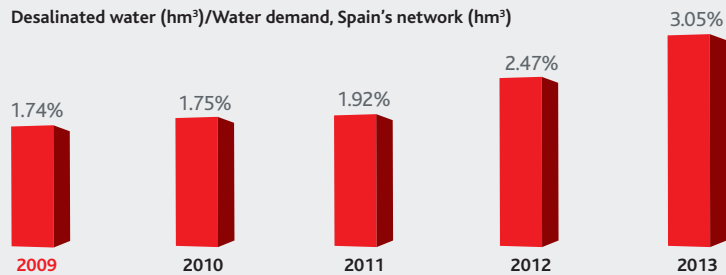
Water managed by ACCIONA Agua (by volume)



Water savings

ACCIONA's contribution towards reducing consumption of a scarce resource such as freshwater will also play a key role in the Company's business plans. The desalinated water ACCIONA currently produces in Spain meets more than 1.7% of demand in the distribution network. That figure is estimated to remain about the same in 2010 and to increase to more than 3% in 2013, with the consequent reduction in stress on supplies.

Desalinated water (hm³)/Water demand, Spain's network (hm³)



* Water supplied from desalination based on 2007-2009 revenues. Data on water supplied to the public distribution network 2006-2007 (Source: INE).

Waste management

The characteristics and total amount of waste generated by ACCIONA activities varies more depending on the type of

activity than on internal management, and is particularly significant in the Infrastructure area. Management systems and specific

treatment processes have been designed for each business line in an effort to minimize the impact on the environment.

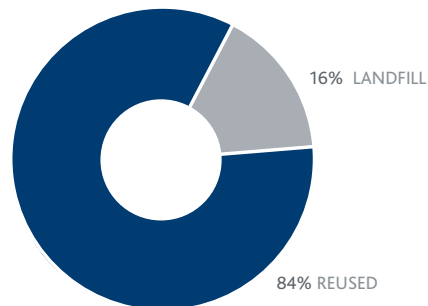
ACCIONA INFRASTRUCTURE				
TYPE OF WASTE		2009	2008	2007
NON- HAZARDOUS WASTE	METALS (t)	4,488.50	2,487	2,856
	TIMBER (t)	6,656.15	5,678	3,814
	PLASTICS (t)	467.21	265	165
	RUBBLE (t)	1,605,103.58	1,707,037	1,976,794
HAZARDOUS WASTE	CONTAMINATED EARTH (kg)	62,618.54	64,511	162,059
	DRY CELLS AND BATTERIES (kg)	1,757.45	2,317	2,482
	USED AIR FILTERS (kg)	1,588.68	2,152	348
	USED OIL FILTERS (kg)	4,073.32	12,236	4,906
	CONTAMINATED PLASTIC PACKAGING (kg)	38,018.07	25,003	17,706
	CONTAMINATED METAL PACKAGING (kg)	40,477.34	30,502	38,824
	VEHICLE BATTERIES (kg)	3,396.12	11,018	13,559
	MINERAL AND SYNTHETIC OIL (kg)	89,648.51	236,341	94,586

Data reflects national and international projects, machinery and workshops.
International projects are underway in Chile, Brazil, Venezuela, Mexico, Canada, Gabon and Poland.

WASTE MANAGEMENT AT ACCIONA INFRASTRUCTURE (SPAIN AND OTHER COUNTRIES)						
WASTE MANAGEMENT (SPAIN AND OTHER COUNTRIES)	2009			2008		
	% LANDFILL	% RECYCLED	% REUSED	% LANDFILL	% RECYCLED	% REUSED
METALS	2.35%	92.37%	5.31%	10.63%	69.19%	20.20%
TIMBER	17.75%	77.43%	4.82%	24.47%	63.53%	12.00%
PLASTICS	17.42%	82.55%	0.02%	35.34%	61.53%	3.94%
RUBBLE	70.96%	21.02%	8.02%	30.65%	39.74%	29.61%

In 2009, ACCIONA Infraestructure managed a total of 14,926,234 m³ of earth in Spain and abroad, of which 16.38% was disposed of in landfills, compared with 57.3% in 2008. The remainder (83.55%) was reused.

ACCIONA Infraestructure land management



ACCIONA INFRASTRUCTURE MAINTENANCE				
TYPE OF WASTE			2009	2008
NON-HAZARDOUS WASTE	Municipal solid waste	t	883.27	708.40
	Plastics	t	48.84	50.53
	Metals	t	139.31	225.43
	Empty plastic packaging	t	4.96	20.18
	Earth*	m ³	26,572.83	6,252.20
HAZARDOUS WASTE	Plant waste	t	24.32	614.33
	Contaminated plastic packaging	kg	1,519.5	234.35
	Contaminated metal packaging	kg	1,623.1	713.50
	Mineral and synthetic oil	kg	463.97	419.98
	Dry cells and batteries	kg	58	56.65

(*) The 2008 figures for earth were incorrect due to misinterpretation of the units.

ACCIONA INSTALLATION SERVICES					
NON-HAZARDOUS WASTE				HAZARDOUS WASTE	
PLASTICS (KG)	CDW (T)	PAPER (KG)	WIRING (KG)	CONTAMINATED RAGS AND ABSORBENTS (KG)	CONTAMINATED PLASTIC PACKAGING (KG)
1,834	225.55	796	236	163	152

ACCIONA ENERGY						
TYPE OF WASTE		2009	2008	2007		
NON-HAZARDOUS WASTE	DEHYDRATED SLUDGE FROM WASTE WATER TREATMENT PLANT	t	186	108	172	
	METALS	t	115	106	65	
	TIMBER	t	103	423	267	
	SLAG	t	3,333	5,593	6,746	
	ASH	t	2,968	3,781	2,971	
	MINERAL AND SYNTHETIC OIL	kg	253,202	145,037	117,922	
	USED OIL FILTERS	kg	7,186	35,592	25,598	
HAZARDOUS WASTE	CONTAMINATED PLASTIC PACKAGING	kg	32,568	27,151	22,608	
	WATER CONTAMINATED WITH OILS AND HYDROCARBONS	kg	8,395	9,951	53,914	
	CONTAMINATED RAGS AND ABSORBENTS	kg	241,601	123,169	125,561	
	DRY CELLS AND BATTERIES	kg	2,736	1,366	1,515	

ACCIONA AGUA					
TYPE OF WASTE			2009	2008	2007
NON-HAZARDOUS WASTE	METALS	t	12	12	48
	EARTH	m ³	9,364	2,975	22,529
	PRE-TREATMENT RESIDUES	t	2,590	10,466	5,890
	SAND FROM DE-SANDING PROCESSES	t	1,931	4,932	5,180
	DEHYDRATED SLUDGE	t	74,384	111,873	117,627
	TIMBER	t	8,39	12	48
	RUBBLE	t	810	1,575	6,764
	GREASE FROM DE-GREASING PROCESSES	t	883	1,183	3,572
HAZARDOUS WASTE	OIL	kg	5,034	11,930	10,916
	LABORATORY CHEMICALS	kg	3,896	825	771
	CONTAMINATED PACKAGING	kg	1,229	2,507	2,652
	ABSORBENTS AND RAGS	kg	446	897	947
	FLUORESCENT TUBES	kg	116	562	406

Implementation of the first online discharge control unit in Toro (Zamora)


In 2009, ACCIONA Agua developed and commenced operation of Spain's first online discharge control unit in the cheese industry.

The facility is located alongside the factory and connected to the local sewage network, enabling it to quantify and measure the quality of discharges into the network. A control flow meter and a sample taker were installed so that if an abnormal measurement is detected, three samples of the discharge are taken.

The online control and remote supervision system is connected via 3G telephony, enabling it to transmit data and obtain a range of useful features, as a result of which the unit can operate with total autonomy.

This equipment allows for the quality of any discharge that reaches ACCIONA Agua facilities to be controlled, enabling the company to plan its response and obtain legal coverage for any related problems.

This online system controls the quality of any waste that arrives at ACCIONA Agua



ACCIONA LOGISTICS & TRANSPORT SERVICES					
TYPE OF WASTE			2009	2008	2007
NON-HAZARDOUS WASTE	ONSHORE MSW INSTALLATIONS	t	991	506	1,180
	MARPOL V WASTE (SHIPBOARD MSW)	m ³	18,452	20,770	17,801
	PAPER	t	-	750	72
HAZARDOUS WASTE	MINERAL OIL	kg	4,827	6,113	4,540
	VEGETABLE OIL	kg	1,414	1,559	1,058
	DRY CELLS AND BATTERIES	kg	1,974	3,161	1,116
	CONTAMINATED PLASTIC PACKAGING	kg	9,948	5,905	6,659
	CONTAMINATED METAL PACKAGING	kg	12,796	13,201	15,094
	USED OIL FILTERS	kg	13,437	18,076	17,537
	FLUORESCENT AND MERCURY VAPOUR LAMPS	kg	1,697	2,740	2,515
	MARPOL I (OILY WASTE FROM SHIPS)	m ³	8,213	13,008	11,448
	ALKALINE CELLS	kg	115	152	678
	CONTAMINATED RAGS AND ABSORBENTS	kg	18,801	22,110	19,239
	PAINT RESIDUES	kg	1,881	67	940
	HYDROCARBON RESIDUES	kg	3,333	7,227	3,654

ACCIONA URBAN & ENVIRONMENTAL SERVICES, HAZARDOUS WASTE

TYPE OF WASTE		2009	2008	2007
OILS	kg	3,225	8,445	8,129
BATTERIES	kg	725	3,171	2,366
CONTAMINATED PACKAGING	kg	306	1,032	654
USED OIL FILTERS	kg	253	1,369	1,043

WINERIES

TYPE OF WASTE		2009	2008	2007	
NON-HAZARDOUS WASTE	POMACE	kg	822,140	883,180	879,110
	STALKS	kg	114,711	122,152	21,277
	PAPER	t	147	173	255
HAZARDOUS WASTE	MINERAL OIL	kg	366	1,154	400
	BATTERIES	kg	150	300	322
	CONTAMINATED PLASTIC PACKAGING	kg	260	211	120
	HYDRATED SLUDGE FROM WASTE WATER TREATMENT PLANT	t	560	941	628

Landfills

The main sources of discharges in the ACCIONA Group are in the Energy division (in terms of volume) and ACCIONA Trasmediterranea (in terms of potential impact).

TOTAL DISCHARGES ACCIONA ENERGY (m ³)	
2009	201,629.43
2008	203,616.15
2007	248,705.00

In 2009, ACCIONA Energy's biomass plant in Sangüesa utilized 27 hm³ for cooling; the water was taken from a surface water course and returned to that water

course with no significant impact on the environment. This avoids the need to install cooling towers and reduces the electricity consumption such towers would have required. Moreover, the plant does not actually consume any of the water it uses, whereas cooling towers lose water due to evaporation.

ACCIONA TRASMEDITERRANEA			
	2009	2008	2007
BILGE WATER (m ³)	4,762	7,105	7,875
SEWAGE FROM ONSHORE FACILITIES (m ³)	524	15,787	13,441
SEWAGE FROM SHIPS (m ³)	60,117	85,072	95,283

	TREATMENT	ENVIRONMENTAL QUALITY PARAMETERS
BILGE WATER	In addition to bilge water treatment in 2008, a study considered evaporating water from the sludge tanks with a view to discharging only the solid fraction.	Necessary conditions for discharge: <ul style="list-style-type: none"> ■ At sea. ■ Standardized hydrocarbon filtering equipment. ■ Undiluted effluent hydrocarbon concentration of not more than 15 ppm. ■ For discharge in special areas (Mediterranean Sea), the hydrocarbon filter equipment must have alarms to indicate that the maximum level has been reached.
ONSHORE SEWAGE TREATMENT FACILITIES	Discharge directly into port sewer. Removed in tanker trucks by authorized waste manager.	
OFFSHORE MSW	Ships equipped with three different systems: <ul style="list-style-type: none"> A. Sewage treatment plant may discharge even in port. B. Ships without treatment plants but with systems for comminution and disinfection: they may discharge more than 3 miles offshore. C. Ships with retention tanks (untreated): direct discharges are permitted over 12 miles offshore provided that the ship is travelling at no less than 4 knots and the rate of discharge is moderate. 	A. Ships with treatment plants: must conduct weekly analyzes in line with the following parameters: <ul style="list-style-type: none"> ■ Clarified effluent (no visible floating solids). ■ No appreciable colour in surrounding waters. ■ Dissolved [O₂] = 6-10 ppm. ■ Residual Cl = 1-2 ppm. ■ pH= 6-8.5. B. Ships without a treatment plant: there is still no regulation in this area in the MARPOL Convention.