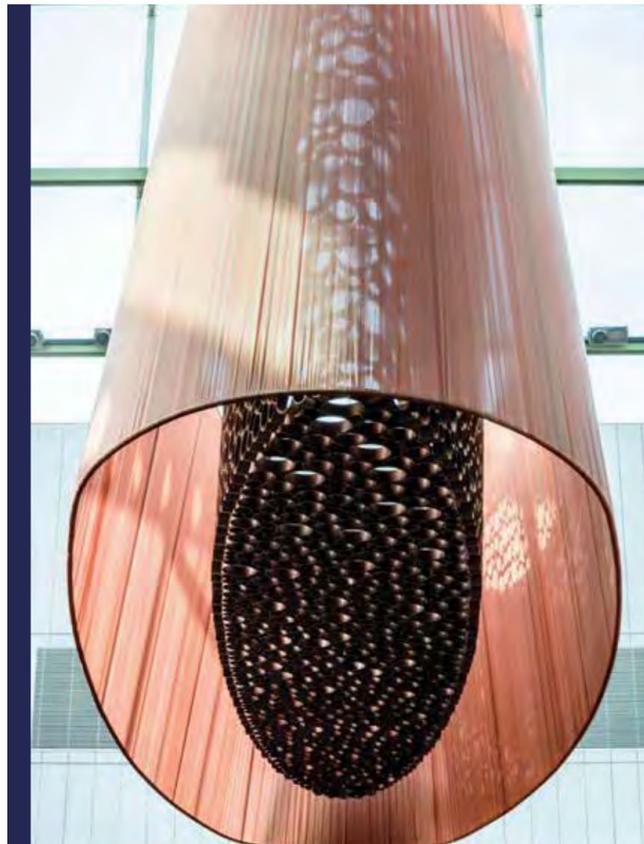


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- 4 International ISO recognition, acceptance and relevance in the market
- 5 Sonae Sierra and its ISO certified Management System

01.



EXECUTIVE SUMMARY

ENVIRONMENTAL STATS AND REAL ESTATE

- It is estimated that the built environment accounts for approximately 40% of energy consumption and 36% of CO₂ emissions in the EU;
- Global water demand is projected to increase by 55% between 2000 and 2050. Cities and property owners need to anticipate and be prepared for imminent water challenges when they invest in buildings and infrastructure;
- According to JLL, in the UK, 64% of all waste is generated by the real estate sector.

SONAE SIERRA STATS

- In 2019, Sonae Sierra benefitted from costs avoided corresponding to €16.7 million due to the implementation of energy, water, and waste efficiency measures since 2002.
- In 2020 GRESB edition - the global environmental, social and governance benchmark for real assets - the Sierra Prime boasted 4th place in the European retail sector (Core). It was also awarded Green Star status and a 5 Star rating, which is the highest GRESB Rating and recognition for being an industry leader.
- 52 ISO 14001 certifications have been awarded to operational shopping centres since 2005.
- 48 OHSAS 18001/ISO 45001 certifications have been awarded to operational shopping centres since 2008.
- 36 ISO 14001/OHSAS 18001 or ISO 45001 certifications have been awarded to construction sites since 2004.
- Since 2002, electricity consumption has decreased by 54%, the waste recycling rate has improved by 249% since 2002, water consumption has decreased by 35% since 2003.
- GHG emissions (Scope 1 and 2) have reduced by 82%, and the accident rate per worker has decreased by 30%.

IN PURSUIT OF ESG RESULTS

02.

Today companies are facing environmental, economic and social challenges of immense complexity, such as pollution, scarcity of resources, climate change, demographic shifts, new diseases and rapid technological changes, which are redefining society's expectations and business environments and results. The rules for capital markets are being rewritten and targeting positive social or environmental impacts are increasingly recognised as material to long-term financial outcomes.

According to the Institutional Investor Survey 2020, from EY "In what is fast becoming a critical decade for us all to address urgent environmental and climate change threats, and while society and the economy are still reeling from the COVID-19 pandemic, these issues are even more important. Although many organizations are in crisis-response mode, wider Environmental, Social and Governance (ESG) issues remain critical and are essential to resilience, long-term recovery and driving a genuine sustainability agenda."

Sonae Sierra is a firm believer in ESG principles and as an early adopter has developed a system that ensures that safety, health and environmental organisational issues are consistently addressed.

Sonae Sierra's Environmental Policy was approved in 1998, reflecting its environmental commitment and stance, recognising the impact that results from its activities, and the adoption of an environmental framework with clearly defined objectives and targets.

In 1999, an Environmental Management System (EMS) was developed based on ISO 14001 standards and applicable to all countries where Sonae Sierra operated. EMS included the Environmental Requirements to be incorporated into the design specifications given to planners at the start of each project.

In 2003, Sonae Sierra launched a specific EMS for construction works to be implemented in all shopping centres under construction.

In 2004, Sonae Sierra's Safety and Health Policy was approved. This policy reinforced Sonae Sierra's commitment to carry out its activities whilst minimising risks to people and assets, as well as to achieve excellent levels of social responsibility, safety and health. Thus, a management system to manage safety and health issues was defined.

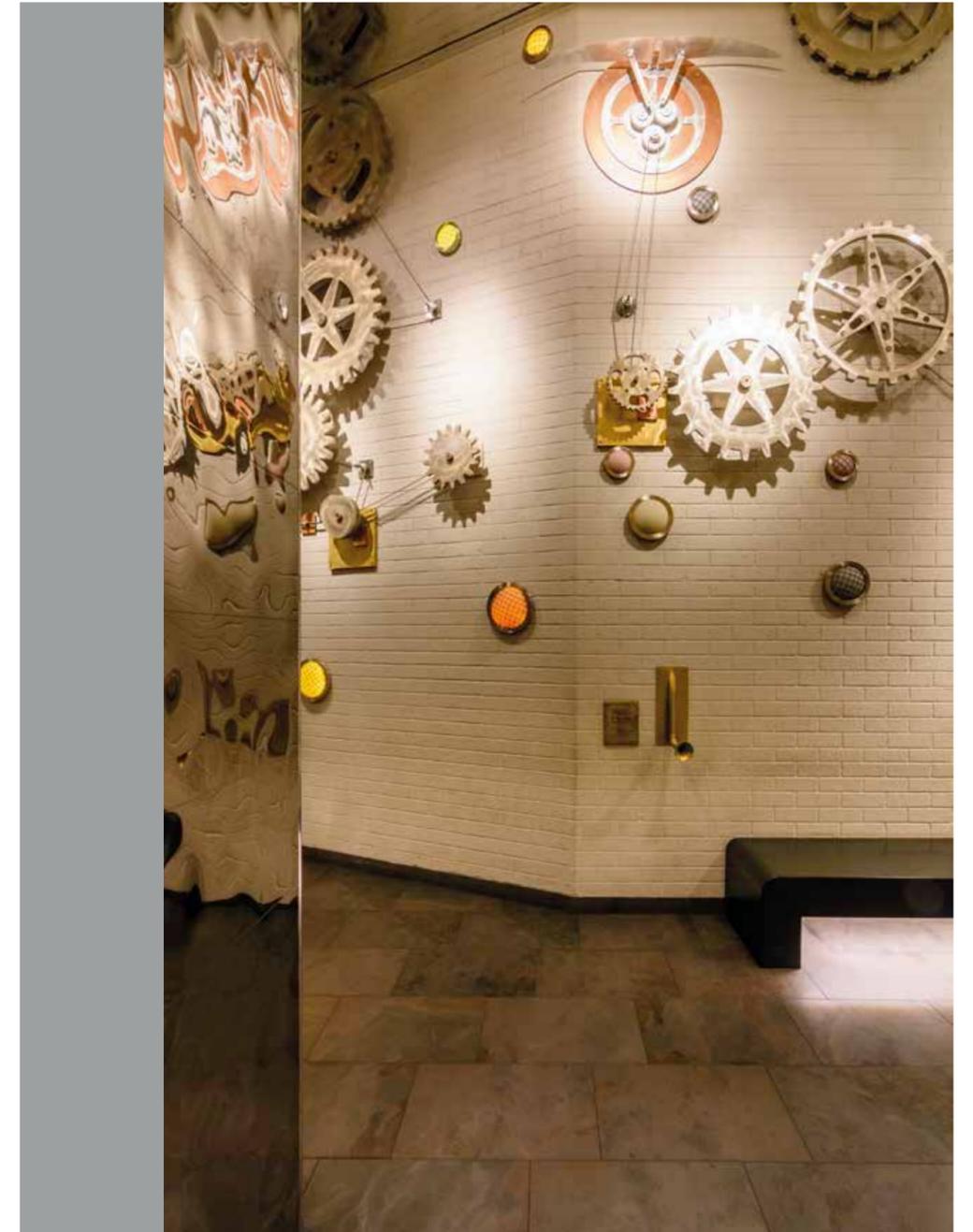
In 2005, Sonae Sierra's corporate EMS was externally certified by ISO 14001:2004, the first such certification in the industry.

In 2008, Sonae Sierra's Safety & Health Management System was certified according to OHSAS 18001. Sonae Sierra was again the first company in the industry in Europe to attain such certification.

In 2010, Sonae Sierra started to implement an integrated management system throughout the entire organisation and business cycle, the Safety, Health and Environmental Management System (SHEMS), including its certification, according to the internationally recognised standards (ISO 14001 and OHSAS 18001/ISO 45001).

The optional certification process demonstrates the successful implementation of SHEMS to stakeholders and could be the reputational recognition that your organisation receives from the steps taken towards sustainability. In Sonae Sierra's case, it contributed to its recognition as an industry leader when, in 2007, it received the first-ever ICSC ReSource Award, distinguishing the excellence of Sonae Sierra's long-term commitment to sustainable development.

With 20 years of experience in management systems and continuous improvement, Sonae Sierra is ideally placed to help you to respond better to the societal upheaval and anxiety caused by systemic issues such as pandemics and climate change and deliver long-term value.



CHALLENGES FACED BY THE REAL ESTATE SECTOR

03.

A. SUSTAINABILITY AS A CORE PILLAR IN BUSINESS

Nowadays, managing for the long-term means adopting Integrative strategies that provide businesses with competitive advantages that simultaneously enhance the quality of the business ecosystem (social and environmental) and ensure economic survivability. This sustainability framework, also known as Triple Bottom Line, reaches far beyond the more traditional measures of profit, return on investment and shareholder value and includes the environmental and social dimensions.

“Business as usual is over and, with it, sustainability as usual” stated Peter Bakker, President & CEO of the World Business Council for Sustainable Development (WBCSD).

The viability of companies in the medium and long-term depends on how they face sustainability and how they contribute to solutions that meet environmental and social challenges.

The pandemic scenario is clearly demonstrating that the resilience of companies is directly connected to human and social capital, and environmental, social and corporate governance (ESG) principles that provide information to improve approaches to corporate risk management and streamline the capacity to adapt, innovate and respond to social and community needs.

“To enhance private sector resilience to future systemic shocks, experts call on companies to strengthen their ESG commitments, and rethink their business models and supply chains with sustainability and long-term priorities in mind.” The GlobeScan-SustainAbility Survey, 2020.

At the same time, sustainable development is seen as an opportunity to improve competitiveness and growth, as a source of inspiration for innovation efforts and to address increasingly interconnected global challenges.

Real estate must therefore achieve the greatest levels of environmental sustainability while ensuring the highest economic value and the increased well-being of individuals.

B. INVESTOR REQUIREMENTS

As investors and regulators across the world shift their focus towards sustainability, investment managers are adapting and increasing their ESG integration efforts, meaning that nowadays it has shifted from a niche trend to a core pillar of real estate investing.

The United Nations Principles for Responsible Investment (UN-PRI) initiative resulted from the contributions of a group of international investors that worked together to put the six principles launched in 2006 into practice and it has since established itself as the leading ESG organisation. In 2018, these investment principles were supported by over 2,000 signatory companies with over US\$2.25 trillion of assets under management (AUM).



Graphic 1 - UNPRI development of the number of signatories from 2006-2018 (Source: PRI; 2018)



Globally, almost a third of assets under management are now being invested according to the premise that ESG factors can materially affect their performance and market value.

Additionally, in 2012, the Global Sustainable Investment Alliance (GSIA) published the GSI Review that had emerged as a global standard of investment classification. One of the GSIA's Sustainable Investment Strategies worth highlighting is the, “Positive/best-in-class screening: investment in sectors, companies or projects selected for positive ESG performance relative to industry peers”. In the GSIA Annual Report, the Asset Managers reported that major drivers for the use of sustainable investing strategies were the desire to minimise risk and improve financial performance over time. This may also explain why the sustainable investing strategy of ESG integration has become more widely deployed globally, with 60 percent more global assets managed with this strategy in 2018 than in 2016.

INTERNATIONAL ISO RECOGNITION, ACCEPTANCE AND RELEVANCE IN THE MARKET

04.

International Organization for Standardization (ISO) is an independent, non-governmental international organisation with a membership of 165 national standards bodies. Through its members, it brings together experts to share knowledge and develop voluntary, consensus-based, market relevant International Standards that support innovation and provide solutions to global challenges.

ISO aims to publish highly anticipated standards with the potential to make a serious impact and further the role of standards as a basis for legislation that protects the planet and its people.

The Plan-Do-Check-Act (PDCA) cycle is the operating principle of all ISO management system standards.

Third-party certification – whereby an independent certification body audits the practices against the requirements of a standard – is a way of signalling to buyers, customers, suppliers, and other stakeholders that a standard was properly implemented. Furthermore, for some organisations, it helps to show how the regulatory or contractual requirements are met. It is a clear way to demonstrate their commitment to ESG principles.

ISO IN NUMBERS

- **23,487 International Standards**
- **165 Member Countries**
- **792 Technical Committees and Subcommittees to manage development and adoption of new standards**
- **312,580 ISO 14001 valid certificates by the end of 2019**
- **Recognition in 197 countries with ISO 14001 certification**
- **38,654 ISO 45001 valid certificates by the end of 2019**
- **Recognition in 196 countries with ISO 45001 certification**

c. ISO 14001

I. HISTORY

The “Environment Movement”, which gathered force in the 60s was followed, in 1972, by the first United Nations conference on the human environment. At that time, the Stockholm Declaration placed environmental issues at the forefront of international concerns and marked the start of dialogue on the link between economic growth, pollution, and the well-being of people around the world.

In response to this, several industries adopted voluntary codes of environmental conduct and environmental auditing programmes which formed a platform for environmental management systems.

In 1987, the United Nations World Commission on Environment and Development (known as the “Brundtland Commission”) published a report called “Our Common Future”, which first used the term “sustainable development” and called on industry to develop effective environmental management systems. A universally recognised definition of sustainable development was defined in the report as: “**development that meets the needs of the present without compromising the ability of future generations to meet their own needs.**”

The most significant environmental milestone was not until 1992, during the Rio de Janeiro Earth Summit, when the United Nations reached an agreement to protect the environment by reducing the negative impacts of business activities.

As companies formalised their approaches to pollution prevention and adopted voluntary auditing, there was growing recognition of the need to standardise such procedures.

In 1992, the first standard for environmental management emerged, it was the British Standard Institute (BSI) - BS7750. This was shortly followed by the European Commission’s Eco-Management and Audit Scheme (EMAS) (1836/93/EC) in 1993.

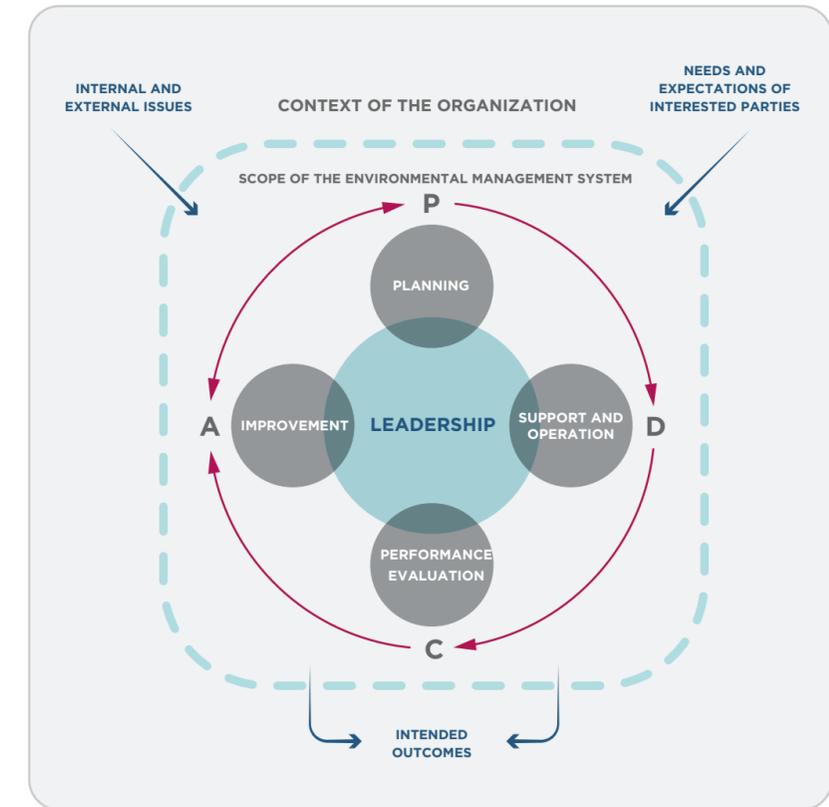
Around the same time, ISO created a new technical committee to develop an international Environmental Management System (EMS) standard, which was adopted and published, in 1996, as ISO 14001 Environmental management system specification.

The ISO 14001 is a standard that provides guidance with the implementation of an environmental management system to help organisations minimise how their operations negatively affect the environment (i.e., cause adverse changes to air, water, or land); to comply with applicable laws, regulations, and other environmentally oriented requirements; and to continually improve their environmental performance through more efficient use of resources and waste reduction, gaining a competitive advantage and the trust of stakeholders.

II. WHY IMPLEMENT ISO 14001?

EMS is one of the most important tools available for the purpose of making organisations more environmentally proactive and efficient and aims to encourage an organisation to control its environmental impacts and continuously reduce such impacts, as such to address the environmental dimension of the ESG principles.

Under the ISO 14001 companies define a policy, set objectives and targets for managing their environmental issues (waste, water, energy and climate change, biodiversity and air emissions, etc.), monitor, measure, and evaluate their progress related to environmental performance. The system is reviewed annually to guarantee its suitability and continuous improvement throughout the PDCA cycle.



ISO 14001 PDCA Cycle (Source: ISO 14001)

INTERNATIONAL ISO RECOGNITION, ACCEPTANCE AND RELEVANCE IN THE MARKET

04.

III. BENEFITS

The standard helps to put in place a structured management framework to better control the impacts on the environment, reduce the risk of potentially costly pollution incidents and ensure compliance with environmental legislation.

Further to using ISO 14001 to demonstrate responsible corporate citizenship, many are viewing it as a tool to boost profitability - by improving waste management, optimising the use of resources, and taking greater control of related costs.

The main benefits from the implementation of ISO 14001 are:

- **Provides a system to drive the internal environmental strategy forward;**
- **Efficiency as a cost-saver as it provides a competitive and financial advantage through improved efficiencies and reduced costs;**
- **Staying ahead of regulations guarantees compliance with current and future statutory and regulatory requirements;**

- **Boosts sustainability and brand reputation by increasing stakeholder confidence through strategic communication and thus improving the image and credibility of the company;**

- **Encourages innovation;**

- **Encourages better environmental performance of suppliers by integrating them into the organisation's business system.**

D. OSHAS 18001/ISO 45001

I. HISTORY

Occupational health and safety truly began in 1970, with the launch of the Occupational Safety and Health (OSH) Act, in the United States. The goal of this law was to improve safety and guarantee safer working conditions for all workers, regardless of their job or industry. As such, the law addressed issues related to known health and safety hazards, such as unsanitary conditions, cold and heat stress, and environmental toxins.

It was also under this law that the Occupational Safety and Health Administration (OSHA) was created, the federal body responsible for workers' health and safety that quickly developed the first standards that nowadays are the base upon which the current standards are built.

Regarding ISO 14001, in 1996, BSI challenged the status quo and issued BS 8800 - the guide to occupational health and safety management systems that formed the foundation of the first version of OHSAS 18001, launched later in 1999, after reaching a consensus with other national bodies that in the meantime had also developed other similar standards.

Although the ISO did not consider OHSAS 18001 an official ISO standard, it was widely recognised across the globe by several industries. It provided a framework for the effective management of OSH, including aspects of risk management and legal compliance but somehow was not fully aligned with the ISO standards. This made full integration with other management systems such as the ISO 14001 difficult.

In 2018, ISO 45001 was launched and brought with it the possibility of adopting it within OHSAS 18001. ISO 45001 follows the same structure as other ISO standards, facilitating integration, therefore several companies chose to make the transition from the OHSAS to the ISO 45001. In addition, the ISO 45001 introduced other innovations, forged by experience, such as top management and employee involvement, a focus on context, inclusion in the system of subcontractors and suppliers, etc.

ISO 45001 is designed to prevent work-related injury and ill-health and to provide safe and healthy workplaces, ensuring safe work conditions, health and well-being and equality practices. It is aligned with other ISO systems in the way it follows the high-level structure.

II. WHY IMPLEMENT ISO 45001?

An effective occupational health and safety management system helps to protect and enhance the most important asset - People - it drives business excellence and demonstrates to investors and other stakeholders the organisation's commitment to the social dimension and enhances the ESG profile.

The aim of ISO 45001 is to provide a high-level understanding of the important issues that can affect the organisation either positively or negatively and show how it manages the occupational health and safety responsibilities of its employees.

Issues of interest are those that affect the organisation's ability to achieve its intended outcomes. These include the objectives it has set for its OHSMS, such as meeting its OHS policy commitments.

The main objectives are to reduce illnesses and injuries and improve productivity in the workplace.

III. BENEFITS

- **Strengthening of legal and regulatory compliance whilst reducing business losses;**
- **Reduce the costs related to insurance premiums, incidents and disruption to operations;**
- **Reduce risks, improving employee safety, and identify opportunities to increase productivity, therefore reducing absenteeism and employee turnover rates;**
- **Enable quicker and systematic improvement of processes;**
- **Increase organisational resilience through proactive risk prevention, innovation, and continual improvement;**
- **Demonstrate brand responsibility by committing to a safe and healthy workplace and boosting stakeholder confidence.**



SONAE SIERRA AND ITS ISO CERTIFIED MANAGEMENT SYSTEM

05.

SHEMS was designed to guarantee continuous improvement in relation to SHE performance and to ensure full adherence to compliance obligations, as well as to demonstrate Sonae Sierra's commitment to all interested parties.

In line with the organisation's environmental policy, the main planned outcomes of SHEMS include:

- **Fulfilment of legal compliance obligations;**
- **Enhancement of environmental performance (e.g., reduction of energy and water consumption) and Safety & Health performance (e.g., prevent safety incidents concerning suppliers, contractors, tenants and visitors);**
- **Enhancement of public image regarding stakeholders (e.g. confidence, branding, and know-how).**



A. RESULTS

I. SHE PERFORMANCE ENHANCEMENT

Within the context of SHEMS, corporate SHE objectives and related actions are established on an annual basis for all sites to ensure continuous improvement of performance and processes. For this purpose, the shopping centres are continuously monitored against a range of key indicators (e.g., water, energy, waste collection and incidents). Data is analysed in view of the objectives, the identification and management of risks and the enhanced practices and processes. SHEMS implementation ensures the enhancement of the performance of these key indicators.

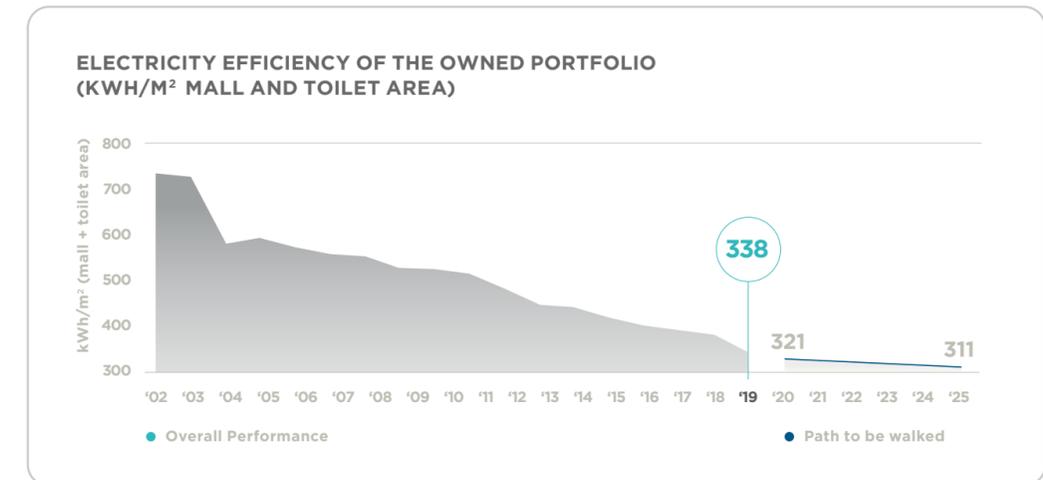
- **The environmental sustainability strategy, implemented through SHEMS, certified by both ISO 14001 and OHSAS 18001 for its Safety, Health and Environmental management, enabled Sonae Sierra to benefit from costs avoided corresponding to over €16.7 million in 2019, as a result of energy, water and waste efficiency measures implemented at the owned sites.**

This undoubtedly covers, by far, all the investment carried out in sustainability, as demonstrated below:

- **Recycling rate increase of 249%, since 2002, at the owned portfolio.**
- **Carbon intensity constantly decreasing with an 82% reduction since 2005.**
- **Electricity efficiency improvements, of the owned portfolio, with consumption constantly decreasing with a 54% reduction since 2002.**
- **Water efficiency improvements, of the owned portfolio, with consumption constantly decreasing with a 35% reduction since 2003.**
- **Accident rate per worker has decreased by 30% since 2005.**

ENERGY (ELECTRICITY)

The electricity consumption of the owned portfolio (excluding tenants) has decreased significantly by 54% to 338 kWh/m², since the baseline year of 2002.



GHG EMISSIONS

The GHG emissions intensity of the owned portfolio and corporate offices (Scope 1 and 2) has improved by 82% to 15.3 kgCO₂e/m²GLA, since the baseline year of 2005. The long-term target is aligned with the Science Based Targets Initiative and commits Sierra to achieve an intensity of 16.8 kgCO₂e/m²GLA. (Scopes 1 and 2) by 2025, which already reflects a portfolio change.

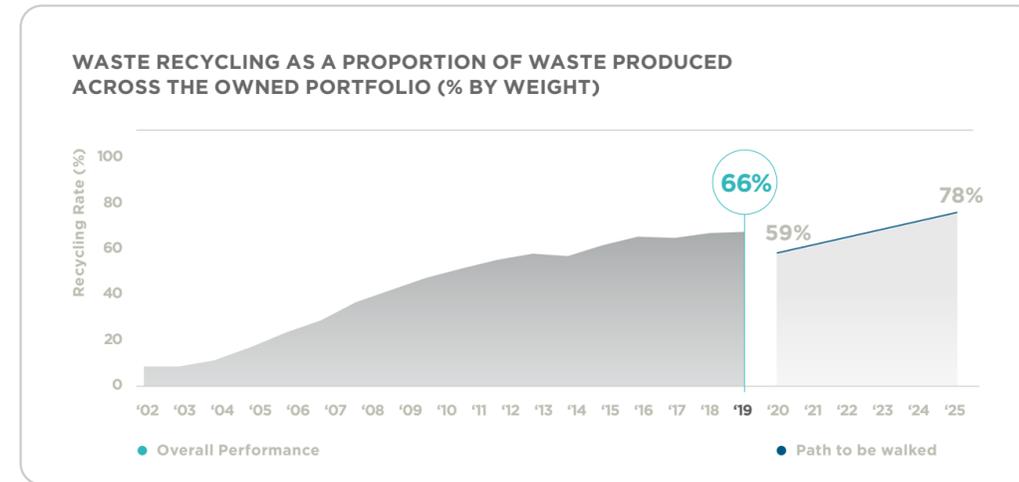


SONAE SIERRA AND ITS ISO CERTIFIED MANAGEMENT SYSTEM

05.

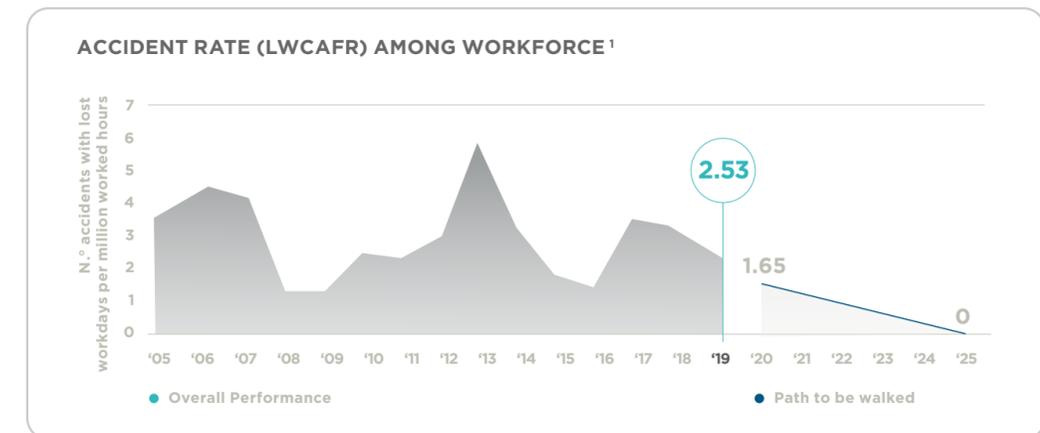
WASTE

All waste produced at Sonae Sierra's sites is segregated and is sent to environmentally suitable destinations (recycling, material valorisation), reducing the waste sent to landfills. Sierra was able to recycle about 66% of the waste produced, representing an increase of 249% since 2002.



ACCIDENT RATE

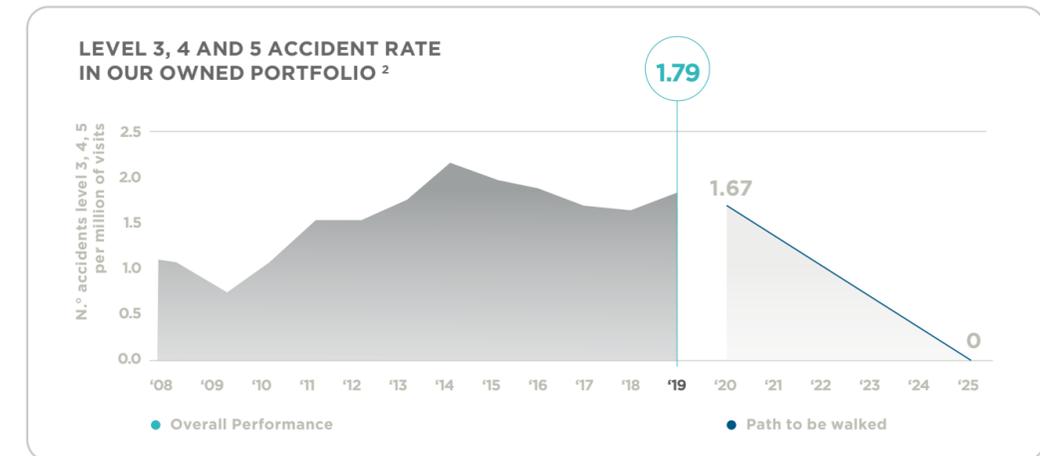
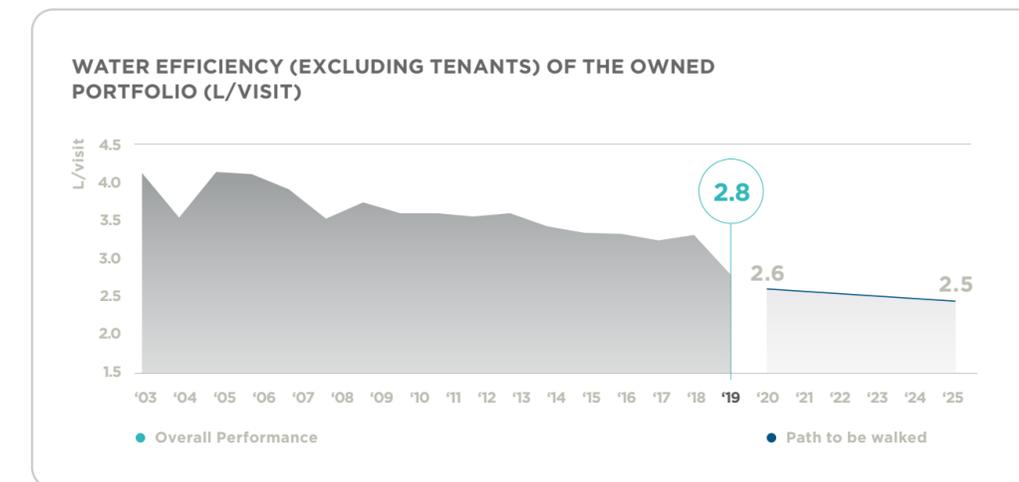
The rate of workforce injuries resulting in lost workdays has declined by 30% to 2.53 accidents with lost workdays per million worked hours, since the baseline year of 2005. The fluctuations emphasise the importance of continuously engaging with the workforce to promote the adoption of safer behaviour as, in the long-term, the objective is to reduce this to zero.



Accidents are also identified with other public-targets such as tenants, service providers and visitors, whom we can influence to ensure our sites are safe but do not directly control. The accident rate of accidents at levels 3, 4 and 5 is still not stable but we are striving to achieve a zero accident rate at these levels.

WATER

The water efficiency of the owned portfolio has improved by 35% to 2.8 litres/visit since 2003



¹ The LWCAFR is the number of accidents resulting in one or more lost workdays per million worked hours by Sonae Sierra workforce (direct employees and supervised workers)
² Number of accidents of level 3, 4 and 5 among tenants, service suppliers, workforce and visitors per million visits. Level 3, 4 and 5 accidents are defined as those resulting in medical assistance, lost workdays/life disruption and fatality/permanent disability, respectively.



SONAE SIERRA AND ITS ISO CERTIFIED MANAGEMENT SYSTEM

05.

II. IMAGE AND REPUTATION

Every year reference is made to Sonae Sierra in numerous published articles mentioning the OHSAS 18001/ISO 45001 Safety & Health and ISO 14001 Environmental Certification of its shopping centres, as well as to SHE marketing events carried out under the scope of SHEMS.

The total number of SHE corporate articles published in 2019 had an Advertising Value Equivalent (AVE) of 483M€.

GRESB

Sustainability is clearly progressively becoming a determinant for real estate investors, as banks and other providers of capital increasingly require evidence that companies are managing sustainability aspects effectively. GRESB¹ is the leading ESG benchmarking in the real estate sector, and a high score is a way to improve the outlook for current and future investors.

Sierra Prime, a real estate Joint Venture managed by Sonae Sierra, was awarded Green Star status and achieved a 5 Star Rating in the 2020 GRESB Real Estate Assessment, ranking 4th in the European Retail sector (Core), performing above the GRESB average. This is the highest GRESB Rating and recognition for being an industry leader.

B. CASE STUDIES OF SHOPPING CENTRES

I. THE CASCAISHOPPING BUSINESS CASE

The implementation of an integrated SHEMS, certified according to ISO 14001/ OHSAS 18001, allowed the centre to achieve remarkable results over the past years in several areas. Waste management was one of those areas.

To improve the waste recycling rate of CascaiShopping, the entire management team committed themselves to this objective.

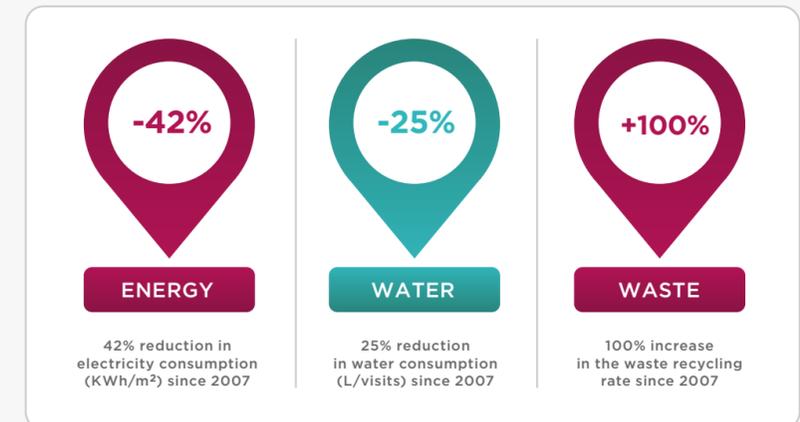
After extensively analysing the strengths and weaknesses of the complete waste management process in the centre, the following ideas were implemented:

- **Segmentation of waste areas scattered throughout the technical corridors for ease of use by tenants;**
- **Elaboration of maps with identification of waste collection areas, per type of waste;**
- **Creation of a centralised waste sorting area for the food court and gravitational connection of waste with ducts to Floor 0 with alarm signalling;**
- **Removal of service stations in the Food Court, replaced by tray collectors in fixed areas. In the unoccupied areas more furniture (seating) was installed;**
- **Implementation of waste sorting equipment in the main waste dock (in collaboration with the waste provider).**

A total investment of €34,800 was made and led to an increase in the recycling rate of 11% when compared with the 2016 performance. In addition to the positive impact on the environment, this also had an economic impact as with an increase of 10% in cost recovery for waste (from 2016 to 2017). This project will have a payback period of fewer than two years, due to the savings in waste management costs and the time optimisation of service suppliers.

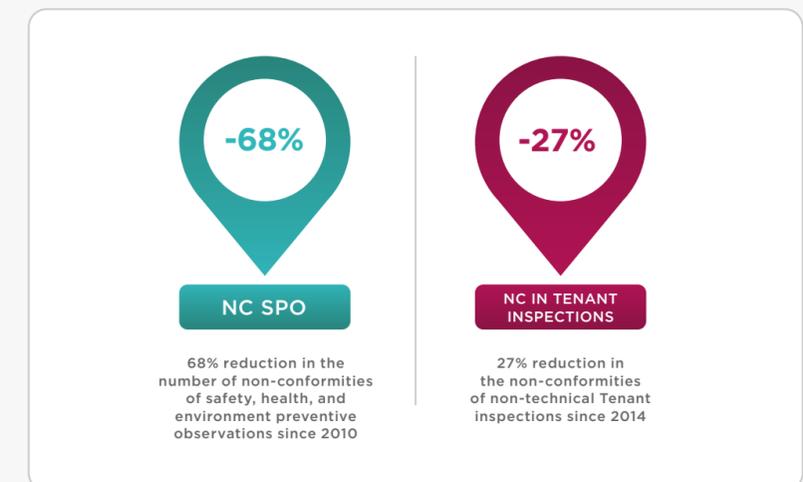
CascaShopping team was able to increase the efficiency of the waste management process, reduce operation costs, improve the quality of service to clients and reduce the risk level for the cleaning and waste management supplier.

This shopping centre was first certified for operations according to the ISO 14001 in 2007 and OHSAS 18001 in 2010 and since then has reduced its environmental impact (graphs include data up to 2019):



As a result of the Energy and Water efficiency measures and Waste Management practices implemented since 2007, CascaiShopping benefitted from costs avoided corresponding to over €389,000, in 2019.

Safety and Health risks were kept at an acceptable level (graphs include data up to 2019):



¹ Mission-driven and investor-led, GRESB assesses and benchmarks the ESG performance of real assets worldwide and monitors the sector's progress towards global sustainability goals. It is widely recognised as the leading benchmarking initiative in the real estate sector and in 2019 covered more than 1,000 property companies, real estate investment trusts (REITs), funds, and developers covering more than 100,000 assets across 64 countries and representing over USD 4 trillion in gross asset value.

05.

II. THE NORTESHOPPING BUSINESS CASE

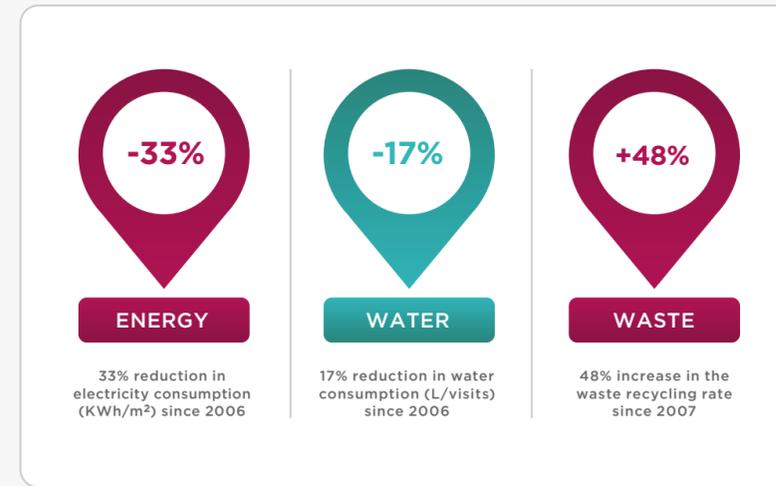
This shopping centre was first certified for operations according to the ISO 14001 in 2005 and OHSAS 18001 in 2009.

Considering the growing threat of climate change, the expected water scarcity, and the social responsibility to preserve this resource Sonae Sierra carries out annual Water Audits of its shopping centres, where problems and opportunities to improve the water efficiency have been identified.

In 2016, the NorteShopping audit recommended improving the metering mechanisms in place to enable the monitoring of the 'partial consumption' i.e., by usage (e.g., toilets, cooling towers). This allowed a significant reduction in water consumption (21.4% in water use), corresponding to savings of 31,296 m³. The pay-back period was about 2 years.

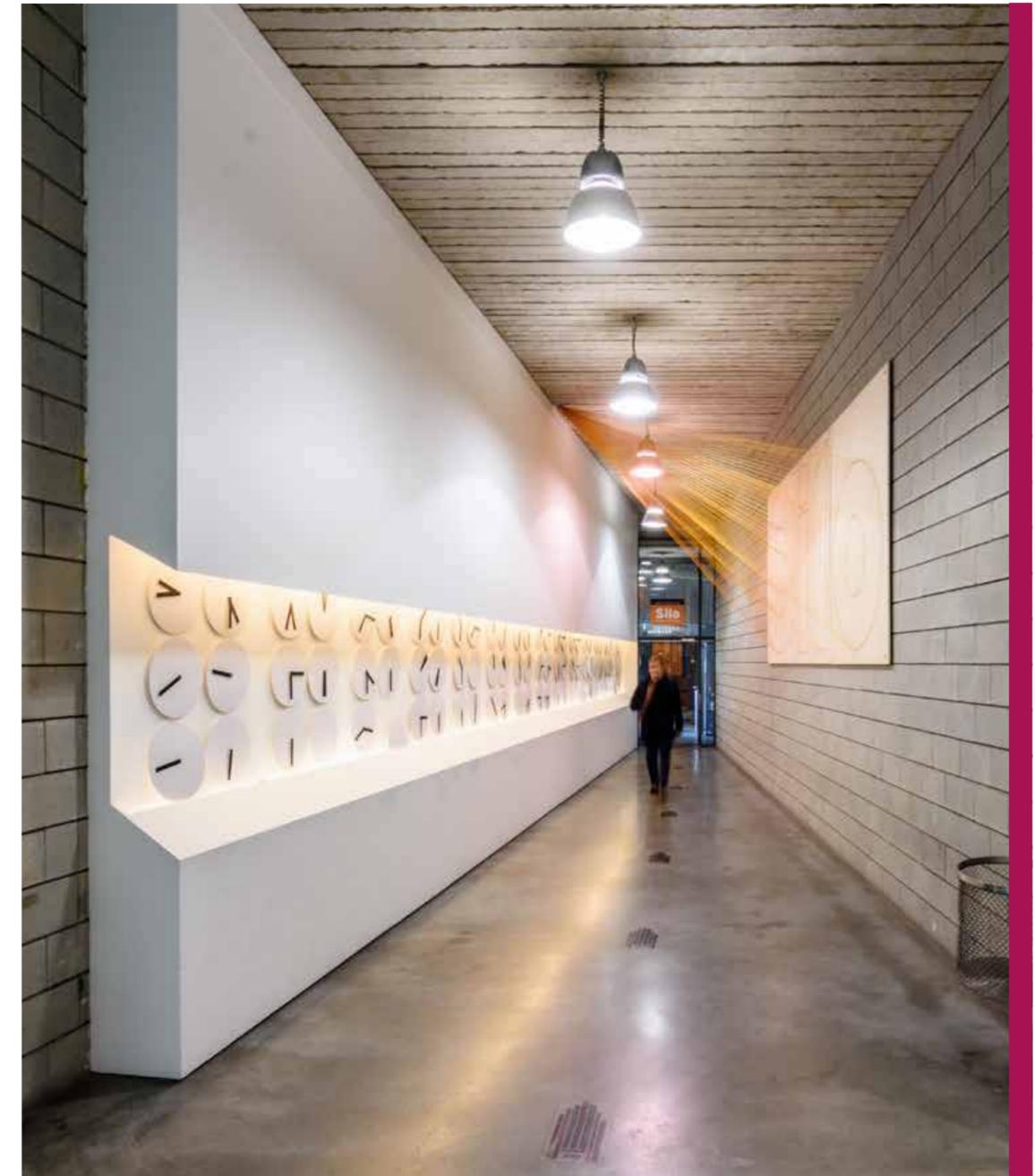
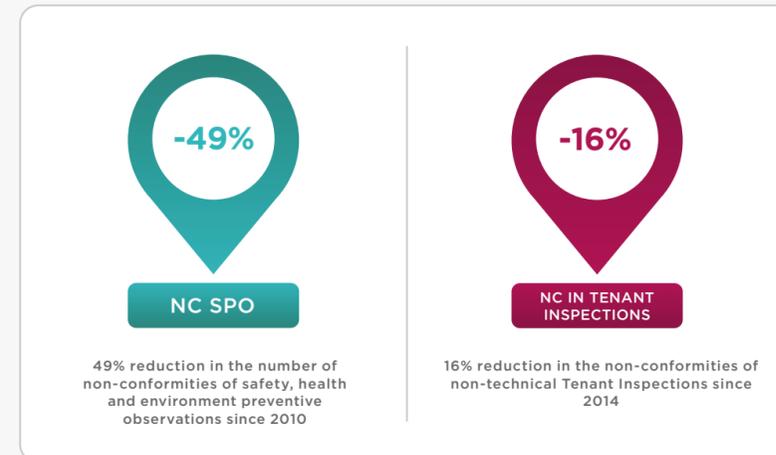
The implementation of an integrated SHEMS, certified according to ISO 14001/ OHSAS 18001, allowed the centre to achieve remarkable results over the past years in several areas.

Reduced environmental impacts (graphs include data up to 2018):



As a result of the Energy/ Water efficiency measures and Waste Management practices implemented since 2006/2007, NorteShopping benefitted from costs avoided corresponding to over €520 thousand in 2018.

Safety and Health risks were kept at an acceptable level (graphs include data up to 2018):



ABOUT



Sonae Sierra is an international real estate company committed to delivering solutions to meet its client ambitions.

With over 30 years' experience in developing, investing and managing retail real estate across four different continents, at Sonae Sierra we have unrivalled expertise and an enviable track record of success behind us.

The sustainability credentials of our real estate assets, and those of our clients, is of the utmost importance to us and we have long been committed to looking at ways to reduce costs and improve efficiency.

If you are looking for the best pathway and bespoke tools to unleash your true sustainable value in real estate assets, uncover sustainable opportunities, improve competitiveness and increase revenue over time, let's get in touch.

Participation
in industry
initiatives:



sonaesierra.com



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ISO 14001 AND OHSAS 18001/ISO 45001 STANDARDS

