

SUSTAINABILITY REPORT 2020



EXPERIENCE THE EXCEPTIONAL

Contents

1	Message from Chris Rea CBE.....	4
2	Sustainability Development.....	6
3	Innovation for the Future.....	8
3.1	Effective Sealing Solutions.....	9
3.2	Reducing Water and Energy Consumption.....	10
3.3	Improving Reliability.....	12
4	Sustainable Operations.....	14
4.1	Energy Management.....	15
4.2	Waste Reduction.....	15
4.3	Ecology.....	16
4.4	Promoting Careers in Engineering.....	17
4.5	Investing in Plant and Machinery.....	18
5	People and Wellbeing.....	22
5.1	Investing in Our People.....	23
5.2	Health, Safety and Wellness.....	24
5.3	Ethical Business Practices.....	25
6	Supporting Our Community.....	26
6.1	Betterworld.Solutions.....	26
6.2	Charitable Donations.....	27
6.3	Nelson Mandela Primary School.....	28
6.4	Community Investment.....	29
6.5	Trust Champion In Business.....	29

Start to Make the World Better



CO₂



A Video Introduction

with Chris Rea, CBE, DL, BSc, CEng, HonFIMechE



**Betterworld.
Solutions**

▶ 7:04 ◀ ⏮ ⏭ ⏯ ⚙ 🖥



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Sustainability Report 2020



1 Message from Chris Rea CBE

Helping to remove 529.5 million cars

Whether or not you 100% accept the premise that global warming is occurring, there is widespread evidence that the media, the scientific community and our workforce, particularly our younger workforce, believe that actions from previous generations are destroying the habitat of the world.

I am absolutely certain that no Executive or Non-Executive Leader of a business of any scale would knowingly engage in any activity which was harming our planet, especially where there was a reasonable prospect of preventing that harm and also still obtaining a return on investment.

The difficulty is that the larger any organization becomes, the less certain it is that the people who direct and lead the business really understand all of the detail in areas where they can help the environment without hurting the bottom line. For that, you need to ask the people who are actually doing the job.

AES Engineering Group of companies has made environmental projects a priority for many years, but recent events have convinced us that we need a direct conduit from our own operators and suppliers.

We also need better communication with our own staff, especially those with the vision and expertise to see how climate-friendly change can also be business-friendly.

We can only act on what we know. And, hopefully, once we know, we can work together to engineer a better world.

We estimate that widespread global adoption of climate-friendly policies in industry could have the equivalent environmental impact of taking 529.5 million cars off the roads, while also providing a useful return on investment. The savings can be achieved using existing energy saving technology, some of which has been known for more than 30 years but used in very few applications.



Investment Policy To Prevent Global Warming

**The health of the Earth is essential to not just
business, but also species survival.**

The Health, Safety and Welfare of all the stakeholders in our Group is the primary concern of the Board of AES Engineering Ltd.

The Group has consistently put sustainability projects first for capital investment and has now decided to debate and publish an investment policy to prevent global warming through technological change and investment decisions.

- Any sustainability project will be given priority over other capital investment with a similar Return on Investment.
- Any sustainability project with a reasonable chance of getting a Return on Investment of 8 years or less, should be brought to the attention of the AES Engineering Ltd. Board
- A written decision on any such project is mandatory within 3 months of project submission.
- All global business heads have local spending authority. Any sustainability project with a higher value should be immediately referred to the Board of AES Engineering Ltd.
- As a Board we undertake to use our personal and corporate presence to influence policy makers to legislate the requirement for such a policy for all businesses with more than 250 co-workers.
- Current or potential supplier input is welcomed, including their use of the global hotline where necessary.

The Board of AES Engineering Ltd. encourages the use of the global "hotline" on 0800-374199 or by email on aes sealhotline@expolink.co.uk to assist with the discreet implementation of this policy where necessary.


C. J. Rea
Managing Director

If you want to help, a good first step would be to encourage your company Board to adopt a policy with a similar spirit to 'An Investment Policy to Prevent Global Warming (PPGW). This policy can be considered as being freely available. There is no requirement to acknowledge any individuals in AES, or the Corporation.



2 Sustainability Development



AES Engineering Group is committed to providing a safe and rewarding workplace, operating ethically, supporting its local communities, minimizing its impact on the environment and engaging its stakeholders. As a company it must continue to reduce its impact on the environment, attract gifted engineers and other skilled employees and offer the solutions that meet increasingly demanding applications and customers. AES Engineering Group always aims to exceed expectations and lead by example, operating in an ethical manner and working towards sustainable development goals.

In 2020 AES Engineering took a proactive move to encourage more businesses to adopt a strategy to prevent global warming. The [Betterworld.solutions](#) website was launched encouraging companies to not only download the policy but also share success stories where they had helped their customers reduce emissions and saved money. More information about Betterworld is included in section 6.1

Today's more socially conscious society means that AES Engineering Group's customers and employees place a premium on working for, or with a company with a focus on Corporate Governance. Its sustainability strategy demonstrates a commitment to these values that provides a focused and practical framework. Where practical, it supports its strategy with third party standards or accreditations that ensure its actions are thoroughly controlled, managed and independently audited.



AES Engineering Group's **sustainability strategy covers the following:**

- Enhancing the health, safety and wellbeing of its employees
- Developing its people and providing high quality employment opportunities
- Protecting the environment by reducing both its own and its customers' impact
- Providing benefits to local communities and particularly to those less advantaged
- Respecting human rights
- Operating in an ethical and transparent manner

In 2015 all Member States of the United Nations adopted the '2030 Agenda for Sustainable Development'. The program defines 17 sustainable development goals (SDGs) along with 169 targets which will stimulate action in areas of critical importance for humanity and the planet.

AES Engineering has recognized the UN sustainable development goals and identified those where it can make a measurable contribution. Where its sustainability strategy is linked will be indicated using the symbols shown on the right.

AES Engineering Group's sustainability strategy has three core strands (People and Wellbeing, Sustainable Operations, Innovation for the Future) which are underpinned with strong leadership and governance.

People and
Wellbeing

Sustainable
Operations

Innovation for
the Future

Leadership and Governance





3 Innovation for the Future

The AES Engineering Group of companies provides products and services that help customers:

- Prevent leakage of product into the environment
- Reduce water and energy consumption
- Improve reliability of their machines and plant thereby reducing unnecessary waste

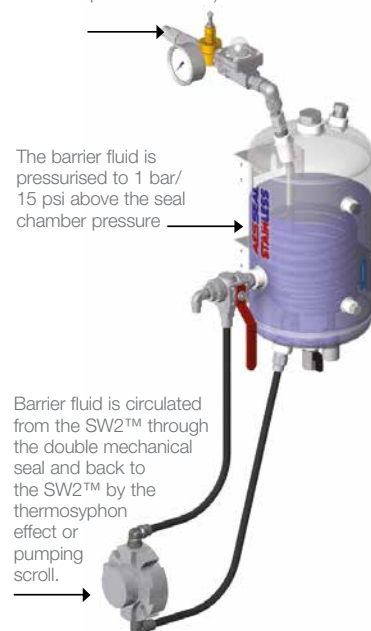
Water is becoming scarcer and more expensive. Still, large quantities of water are essential in many industrial processes. Accurate water balance planning and reduction of overall water consumption are critical. Traditional methods of quench and drain to control seals or gland packing result in large volumes of water being wasted. AESSEAL® provides environmental focussed products that help reduce such waste, both reducing the impacts of the customer plant and their running costs.

“For the AESSEAL plc water management systems sold in 2020, it has been independently verified by an independent body that the emissions avoided totalled 64,284 tonnes of CO2e in 2020.”

(see section 4)



The SW2™ is connected to the plant water line. Water enters the SW2™ through the non-return valve. The water supply regulator is used to set the barrier fluid pressure. (Please note that the SW2™ System can only regulate the water pressure available in the plant water line.)



SW2™ operating principle

3.1 Effective Sealing Solutions

AESSEAL® manufacture products to protect the environment from leakage and emissions of potentially harmful substances. They also provide added value by saving large amounts of energy and water, while working with customer equipment to avoid wear and reduce downtime.

‘Reduced maintenance through improved reliability’

A major oil refinery in South Africa had an unreliable mechanical seal on a cooler water pump. Despite competitors trying a number of different seal support system configurations, the seal was failing approximately every 6 to 9 months. This was as a result of dry running, causing vaporization, damaged elastomers, seal face wear and pump bearing failure as a result of heat transfer.

AESSEAL® installed a CAPI A type 23 mechanical seal along with an API Plan 23 seal support system, utilizing a double Python cooler. The new solution eliminated the need for frequent maintenance and has been operating for over 54 months. Subsequently the customer upgraded eight similar pumps on the plant. (CH01447)



“With the good performance of the seal and Python cooler as a combined solution, we could afford to do the upgrades on the 8 units from our maintenance budget in 2 years. The pump bearing temperatures drop by about 20°C and run at 65-80°C”

Mechanical Rotating Equipment Group Leader.

“MTBF Increase: 500%”



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3.2 Reducing Water and Energy Consumption

Many of today's industries use water extensively through their manufacturing processes. Often, a significant portion of that water is used by the sealing systems used in the pumps in the various parts of their process. AESSEAL® has developed technology that has proven to save a customer 6.3 million litres (1.7 Million US Gallons) of water per year. The systems recycle the water used by the sealing system as opposed to the common practice of discharging it to drain. In addition, these systems can improve reliability by ensuring the seal working environment stays consistent. In some processes seal flush water enters the process fluid (to keep damaging particulate away from the seal faces). A closed loop system can avoid the need for this and, therefore, reduce energy usage.

Improving reliability, increasing efficiency.

A leading refinery in the UK was having trouble with seal leakage from existing carbon box technology on their 150#, 600# steam turbines. Based on prior experience the refinery approached AESSEAL® for an alternative solution.

With no standard solution available, AESSEAL® initiated a development program in order to design a practical solution for the customer. The challenge for AESSEAL® was to:

- Replace the existing carbon box seal
- Utilize standard seal faces (ensuring modularity) with gas lift technology
- Incorporate high temperature polymers
- Utilize a graphite wedge shaft seal
- Incorporate into a compact cartridge design that installs to the existing envelope and PCD
- Cope with; high rotational speeds, as well as slow roll and wet steam

Working with the customer on the design and subsequent test program, AESSEAL® developed a solution for the application. After completion the customer witnessed in-house testing, the seal was installed to a known "Bad Actor", on site for a 3 month trial. After 2 months successful operation the customer waived the rest of the trial and placed orders to install identical seals on two more steam turbines with a view to convert all the steam turbines on site.



Steam loss is a major problem on a Refinery as it incurs considerable costs. A significant benefit of the new seal is that it has eliminated steam leaks previously present; this represents a significant saving for the customer because:

- The Refinery has approximately 150 Steam Turbines meaning the cost of steam has a major impact on the profitability of the business
- There is a Health and Safety issue as the steam produces a veil which affects vision causing a potential problem when working on or around the turbine
- There is an environmental impact caused by the burning of extra fuels
- Steam leakage also contaminates the bearing's lubrication causing them to fail prematurely.

Cost of steam loss from a Single Turbine:-

Average steam loss rate from turbine: 200 lb/hr or 0.0907 T/hr

Turbine runs 24/7, 365 days a year: 8,760 hrs total

$0.0907 \times 8760 = 794.53$ Tons of steam lost per year

Cost of steam @ £17.84 /T

$794.53 \times £17.84 = £14,174.45$

Total Cost of lost steam / Steam Turbine/Year is approximately £15,000.00

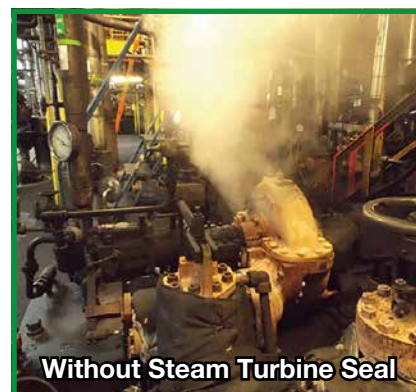
Potential Saving to the Refinery with all the 150 Steam Turbines fitted with Steam Turbine Mechanical Seals is $£15,000 \times 150 = £2,250,000$ per Year

Benefits of Steam Turbine Mechanical Seal Technology on this Refinery

- Increased turbine reliability
- Reduced turbine maintenance costs
- Reduced bearing contamination
- Extends life as non contacting technology
- Elimination of Shaft Wear – generated by the Carbon seal
- Greatly reduces steam loss and increasing efficiency

(CH1446)

Savings:
£2,250,000
per year



“These Steam Turbine seals are so good you should be looking at rolling them out to refineries worldwide”

Refinery Workshop Manager



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3.3 Improving Reliability

Operating plant machinery efficiently is key to optimizing a factory's efficiency. Machinery failure is something companies want to avoid at all costs; unplanned machinery downtime leads to loss of production, possibly product leakage, and potential hazard.

Case study - Highland Spring Group

Background

Highland Spring Group is the largest producer of naturally sourced bottled water in the UK.

They operate with highly critical assets throughout their manufacturing plants, including blow moulders, rinsers, fillers and labellers.

If one of these assets goes down, production comes to a halt. Therefore, it is key that the health and condition of these assets is continuously monitored and maintained to the highest standard, to ensure that assets run to their optimum and unexpected shutdowns are prevented.

Highland Spring Group selected AVT Reliability® to assist them with their condition monitoring (CM) journey on line 4 at the Blackford site in Perthshire, Scotland. The line produces a total 119,000 plastic bottles of water per hour, in sizes ranging from 0.5 to 1.5 litres.

It wanted AVT Reliability® to help increase plant reliability and protecting these critical assets.

The project aims were to:

- Increase productivity
- Extend machinery lifespan
- Optimize the periodic maintenance program
- Reduce machinery maintenance expenditures

Product selection

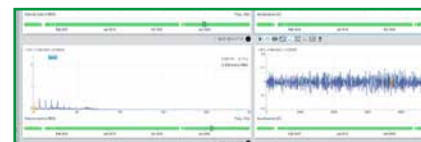
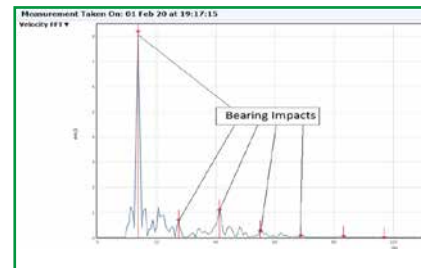
AVT Reliability® have products and services to suit different scenarios. Following a site survey, its engineers advised that the best suited CM technique to increase plant reliability was to carry out vibration analysis using Machine Sentry® Online (MSO-1), on the line's main drive motor and gearbox, as well as the rinser, filler and capper carousels.



MSO-1 is ideal for vibration monitoring on continuously running, highly critical assets. The data being recorded is trended in real time, which allows remedial works to be carried out during a planned outage. Readings are automatically uploaded to the cloud-based platform Machine Sentry® and secured to ISO27001, one of the most widely recognized international standards for industrial supply chain security. As the platform is cloud based, engineers are able to analyse and report on data within minutes, not days, wherever they are in the world. All asset health and analytics are completed in the system, meaning all data remains in one location.

MSO-1 in action

In January this year, the MSO-1 system at Highland Springs Group generated an email alert which identified increasing vibration levels on the outfeed start wheelbearing. This email alert allowed engineers to take action and investigate as soon as possible before the situation got out of hand. Following analysis from expert engineers at AVT Reliability® and discussion with the client, the conclusion was reached that the vibration increase was due to a possible bearing issue. Bearings had not been replaced since 2003. As the fault was found early, further damage to the asset was prevented. If the fault had gone undetected, there could have been catastrophic damage, resulting in a more expensive repair and extended plant downtime.



Benefits

MSO-1 allowed engineers to analyse the data collected and predict when a failure was going to happen. The engineers at Highland Spring Group were then able to plan scheduled downtime and complete the planned work scope within three days, saving 48 hours of repair time, amounting to a total of £16,800. When the cost of the Machine Sentry® system is removed, the actual saving is £10,300 after this one incident alone. The production line has operated without problem since.

Following the work completed by AVT Reliability®, David Simpson, Site Engineering Manager at Highland Spring Group said: "To assist our goal in achieving a world class engineering department, the biggest area to improve was to reduce reactive maintenance and supply our operation customers a reliable preventive maintenance schedule, ensuring machine up time is increased to meet our growing marketplace demand.



"AVT Reliability® came onsite and presented the products they could supply to help us achieve this. Machine Sentry® Online was chosen and installed with almost no disruption to our production line.

"The benefits are huge, with the early warning reports identifying potential issues and reporting recommended actions, which we add to our weekly maintenance plan and rectify. Machine Sentry® Online will be my option as we roll this excellent analysis tool out to other production lines."



4 Sustainable Operations

The AES Engineering Group has consistently put sustainability projects first for capital investment and we have published our Investment Policy to Prevent Global Warming through technological change and investment decisions and we intend to encourage other businesses to do the same. The Group has continued to strive toward creating a more socially, environmentally, and economically sustainable business. The Group regularly reviews its sustainability strategy and as such can positively state that AESSEAL plc has reached a major environmental milestone in achieving a beneficial impact on the environment in 2020.

Following the achievement of UK Net Zero carbon emissions for Scope 1 and 2 emissions AESSEAL plc sought independent verification of Scope 1 to 3 emissions, as well as the balancing impact of the emissions avoided by the use of the company's key products – the AESSEAL® Water Management Systems. The independent consultants verified that AESSEAL's total (scope 1 to 3) emissions for 2020, which include direct emissions from things like business travel, amounted to 46,352 tonnes of CO₂e in 2020. They also separately verified that the emissions avoided by the use of AESSEAL's Water Management Systems, totalled 64,284 tonnes of CO₂e in 2020 which is a net benefit to the environment.

"Beyond Net Zero"

AESSEAL plc achieved its UK Carbon Net Benefit by:

- Continual improvement in line with integrated management systems and its certification to ISO 14001 and ISO 50001 for key operational sites
- Programmes of training and awareness to improve employee understanding of climate change and the behavioural impacts on energy use
- Driving down energy use by adopting energy saving technologies including high efficiency compressors, building management systems, intelligent controls, LED lighting and voltage optimisation
- Purchasing all remaining electricity on zero emission at point of generation tariffs
- Fleet replacement programme encouraging drivers to select lower emission vehicles
- The AESSEAL plc approach and data was verified using the independent assessment body SGS.
- AES Engineering Group has launched a global campaign BetterWorld to drive collective action to mitigate climate change across all industries. (see section 6.1)



“The company is now on target to achieve global net zero greenhouse gas emissions across all its locations worldwide by 2029.”





4.1 Energy Management

28% Electricity Reduction

Through management system controls, training and awareness the behavioural impacts on energy consumption are addressed. This is enhanced by the continued investment in technology that increases operational and facility efficiency. Examples include computerized building management systems to control the heating and ventilation systems, voltage optimization, LED lighting and high efficiency compressors, which resulted in significant savings. By 2020 electricity consumption as a ratio to sales turnover reduced by 28%, while gas consumption as a ratio to degree days* reduced by 33%, both against a baseline year of 2008.

28%
REDUCTION



4.2 Waste Reduction

52% Waste Diverted from Landfill

The ability to reduce waste through adoption of the waste principles of the 'waste hierarchy', reduce, reuse and recycle, has ensured both impact and costs have been kept manageable throughout the sustained growth of the business. Major waste streams including metal, cardboard, paper and even some forms of plastic are segregated for recycling. Even the majority of general waste produced at the Company head offices in Rotherham is diverted from landfill by use of incineration at a CHP plant in Sheffield. Dedicated waste segregation and storage areas have been developed at operational sites to assist with such activities. As a result, significant improvements have been made in the amount of waste disposed of to landfill. When taken as a ratio against turnover by 2018, waste sent to landfill had reduced by 52% compared to the baseline year of 2008. During 2019, over 94% of all waste produced was diverted from landfill due to the levels of recycling and recovery. Every effort is made to further reduce waste by decreasing it at source or through reuse. A program started during 2019 involved sending out good quality pallets for reuse, thus avoiding a further 14 tonnes of wood becoming waste.

52%
REDUCTION

*Fluctuations in external temperature taken into account as a normalizing factor



4.3 Ecology

At the Company's Global Technology Centre in Rotherham, AES Engineering created 'The Wetlands Sanctuary'. As well as providing a habitat for wildlife, the development features a sustainable urban drainage system to reduce any impacts of the development on the local rivers, Don and Rother, allowing nature to provide vital eco-services.

The site also features meadow, woodland and living-roof habitats, which form a wildlife corridor within a predominantly industrial area. This has allowed a diversity of flora and fauna to thrive, with the site regularly visited by lapwings, kestrels, mallards, herons, foxes, and stoats, along with an array of insect and invertebrate species.

Within the woodland areas of the site there are a variety of native trees at varying stages of maturity numbering in the 100s. These further provide habitat for nesting birds while providing shelter for the animals and food for invertebrates. To encourage diversity of species owl nesting boxes have been installed as has a ground level wildlife hotel.





4.4 Promoting Careers in Engineering

It has long been recognized that in many industrial regions there is a shortage of good engineers. As an engineering company, the future of AESSEAL® depends on the continued availability of engineering talent.

In order to encourage young people to consider a career in engineering, AES Engineering Group companies work with local schools, inviting them to visit their manufacturing facilities and experience for themselves the possibilities of a career in engineering. In addition, the company also:

- Visits local schools to give talks about engineering
- Attends school STEM (Science, Technology, Engineering and Mathematics) related events
- Sponsors schools to attend STEM based competitions
- Hosts school students 'work experience'
- Provides university bursaries, currently targeting women, in an attempt to encourage more women into engineering

As a result of the COVID-19 global pandemic AESSEAL® were unable to keep up the levels of direct engagement with students achieved in the past. However through six virtual events we engaged with 130 students and invested 49 hours.

We have already committed to supporting a virtual Get Up to Speed event in early 2021 by being the main sponsor and hope as restrictions lift we can resume the levels of student engagement met in the past.





4.5 Investing in Plant and Machinery

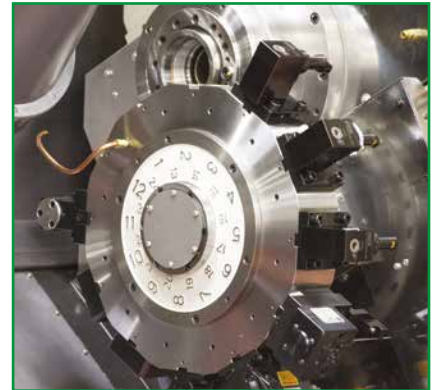
The AES Engineering Group has manufacturing facilities in the UK, USA, China and India. The facilities are equipped with the latest in machining technology, including both 9 axis and 11 axis machining centres. In 2020 AES Engineering have invested \$11m into its US manufacturing facility in Rockford Tennessee and a further \$5million in its subsidiary MS&S in Odessa Texas.

The roll out of SAP HANA has continued throughout 2020 with the following AESSEAL branches now on-line: USA, Ireland, France, Austria, Switzerland, MCK and AVT Sealing Solution Inc. The roll out will continue through 2021. AESSEAL® anticipate this will give further improvements in service to customers, wherever they are.

AES Super Cell

This Spring coming to AESSEAL® is the AES Super Cell! A fully automated robot requiring no intervention leading to increased speed and efficiency to exceed even the highest customer expectations. Experience a revolution... Experience the Exceptional.

Take a couple of minutes to see the robot in action in the video below.



The Group has consistently put sustainability projects first for capital investment and has now developed a policy to help support the prevention of global warming through technological change and investment decisions. This policy can be viewed at:

www.aesseal.com/en/resources/industry-guides/policy-prevent-global-warming

The following is a list of projects undertaken by the Group and the benefits achieved.

Variable Speed Compressors -SIMM Engineering/Atlas Copco

Savings: **105,000 kWh, £14,000, ROI: 2 years**

A new variable speed 55 kW Atlas Copco compressor was installed at the Mill Close site. As the machine is more efficient than the equipment it replaced and can respond to fluctuating demand, significant savings were achieved. Following this success, further similar systems were installed at Bradford and Derby. This saved a further 24,000 kWh per year with a 3 year return.

Lighting Upgrades to LED - J.P. Glasby

Savings: **48,800 kWh, ROI: 4.2 years**

Recent lighting upgrades at Mill Close have included stores, volume production, and bearing protection. These have significantly improved lighting quality within these areas while at the same time reducing energy consumption.

Voltage Optimization - Powerstar

Savings: **247,000 kWh, ROI: 2.1 years**

Voltage optimization installed to cover the entire Mill Close site proved very successful. The expected reduction in energy consumption was more than realized and, once the increase in output was taken into consideration, it was exceeded by a significant margin.

Virtue UPS & Energy Storage - Powerstar/Open Energi

Savings: **tbc after a full review, ROI: tbc after a full review**

Recently installed uninterruptible power source (UPS) system protects the site from power disruption. Significantly more efficient compared to alternative technologies considered, the system also stores significant amounts of energy, allowing the site to reduce demand on the grid during peak times. It can also offer balancing services to the grid should there be changes in frequency or voltage. These services attract grid incentives allowing returns to be made.

Building Management System - Schneider

Savings: **370,000 kWh, ROI: 1.6 years**

A building management system was installed to effectively manage the heating and air handling systems at the Mill Close site. At the time, over 35% of the energy used on the site was for space heating. The installation of the system reduced this figure to under 20% of the site total.

“ Storing energy
in the night
and using it
during the day
is extremely
green and will
reduce the
real CO2 of
your factory
significantly ”

Dr Alex Mardapittas
CEO PowerStar





Sustainable Transport - SYPTE

Savings: **reduces pollution associated with commuting**

Over recent years there have been several initiatives to boost the number of employees choosing sustainable transport. Cycling and public transport schemes have been promoted among employees through events and free passes. To further encourage sustainable transport, the Mill Close site has had a 10 space cycle shelter installed in addition to electric vehicle charging facilities.

Solvent Reduction - D-Grease

Savings: **reduces air pollution from actives carried out onsite**

Volatile Organic Compounds (VOC) can be a source of local air pollution. Efforts have been made to reduce the use of chemicals containing such compounds. Kerosene, used for cleaning, is premium low-odour low-VOC with high flash points. Methoklone, previously used within the repair workshop has been phased out and replaced with aqueous cleaning solutions.

Waste Management - EMR/Veolia/Ron Hull/S2S/CJ Pallets

Savings: **The equivalent of almost 500 tonnes of waste per year is diverted from landfill, ROI: Immediate**

See page 15, paragraph 4:2 for more information.

Flood Prevention & Habitat Conservation - Yorkshire Wildlife Trust

Savings: **Helps reduce flood risks within the area and restores habitat**

See page 14, paragraph 4.3 for more information.

Green Electricity - Orchard/Inspired

Savings: **1146.63 CO₂ tonnes**

A policy of purchasing electricity from 100% renewable sources has been in place for 10 years. This supports the renewable sector and reduces the levels of carbon dioxide emission the business produces. All energy purchased on such tariffs is verifiable and certificates are issued by the suppliers.

“Investing in both plant and machinery ensures the Group continues to deliver the market leading customer service that has sustained its growth over the last 40 years.”



Not All Change is Positive.

It is also not always the case that we properly measure improvements in performance and what was not viable a few years ago may of course work now or in the future.

Nonetheless, without naming the partners with whom it worked, AESSEAL® feel it is important to highlight sustainability projects which had a negative impact.

The company would welcome input from original or new suppliers who believe that they now have options that will meet the requirements of the AES Engineering Ltd. "Policy to Prevent Global Warming".

Vegetable Coolant

Savings: **No savings achieved**

Not all the projects carried out achieved positive results. The introduction of vegetable coolants had significant problems over time, especially within the bearing protection department. The oils may have been presented as sustainable but still had as much potential to cause pollution as mineral oils.

Evaporative Separation

Savings: **No savings achieved**

Evaporators were purchased in order to reduce disposal quantities and costs associated with coolant waste. It worked by heating the liquid and forcing off water leaving only oils. This was expected to reduce liquid waste by up to 90%. Unfortunately, the cost of electricity used to power the units significantly increased while the cost of disposal reduced. Coupled with this, the reliability of the units was poor and they required regular repairs. It was not viable to continue with the technology.

Investing in both plant and machinery ensures the Group continues to deliver the market leading customer service that has sustained its growth over the last 40 years.

SAVING
1146
CO₂ tonnes

SAVING
498
tonnes
of waste
each year



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5 People and Wellbeing



AES Engineering recognizes the value of the people it employs and understands that without them the business could not operate. It always seeks to treat all its employees in a fair and equal manner with no discrimination against any protected characteristics of individuals.

As an engineering business, it feels the pressure of the skills gap and, therefore, invests to develop its own talent to ensure a sustainable skilled workforce. These efforts have been recognized with the business maintaining the Investors in People standard since 1994.





5.1 Investing in Our People

Employees are given their own training programs tailored to their roles within the business. This not only ensures that statutory training is kept up to date, but also that individual development needs are met.

AES Engineering Group understands the importance of learning through experience and has a key strategy to develop its own employees. The business recognizes the skills gap in the sector and, therefore, invests heavily in this area. Working in partnership with local providers, the company runs apprenticeship schemes in the UK, USA and Germany.

In 2020, AESSEAL plc once again achieved 'We Invest in People' Standard accreditation. The Company has become an employer of choice for many young people seeking a career path in the engineering sector.



**INVESTOR
IN PEOPLE**

“Employees are given their own training programs tailored to their roles within the business.”



EXPERIENCE THE EXCEPTIONAL



5.2 Health, Safety and Wellness

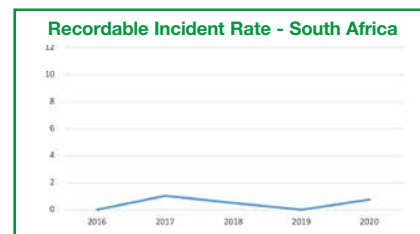
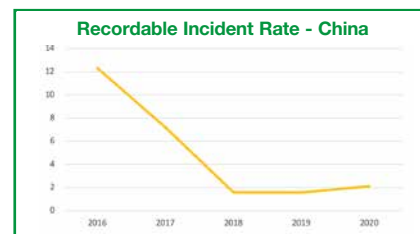
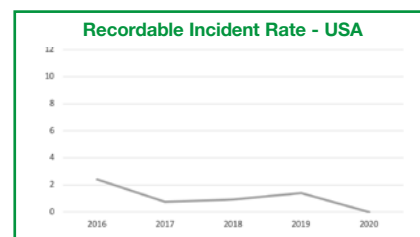
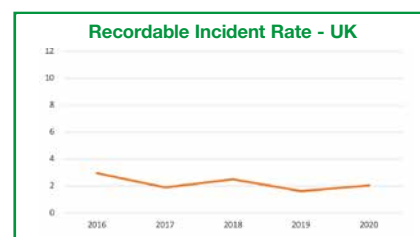
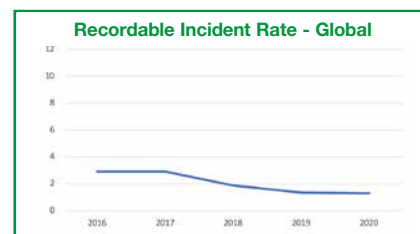
The Company prides itself on providing an exceptional working environment for all its employees. Its facilities are kept to a high standard and are always safe, comfortable places to work. Its culture of continuous improvement has gained positive results with its health and safety record. Assessing and reducing risk, investing in equipment and involving employees at all levels has proved a successful strategy. This has been recognized through the gaining of third party certification and highly sought after awards from external organizations including the British Safety Council and RoSPA.

In the UK, AESSEAL® originally gained certification to OHSAS 18001 in 2004 recognizing its proactive management of safety within the business and in 2020 AESSEAL® won its seventh consecutive RoSPA. AVT Reliability® also won a RoSPA Gold award in 2020. Again, strategic locations around the world have since gained certification to the internationally recognized standard of OHSAS 18001 including South Africa and the Middle East.

AESSEAL® health and safety performance from its key manufacturing locations is shown on the right.

While AESSEAL® prides itself on providing a safe and pleasant working environment it also actively encourages its staff to choose a healthy lifestyle, which includes AESSEAL® sites having drug and alcohol policies.

The COVID-19 global pandemic presented the business with a unique set of issues to address. In order to continue operations while still maintaining employee safety required introduction of new working practices to ensure social distancing. Home working became common place for those staff who were able. Support process were put in place to help with the transition.



5.3 Ethical Business Practices

AES Engineering has always recognized the importance of the governance of its business operating in a highly ethical manner in all its operations, such that its reputation may never be called into disrepute. AESSEAL® respects people for who they are and what they are capable of doing. Everyone deserves an equal chance to succeed based on their hard work, talent and commitment to the AESSEAL® values.

AESSEAL® values a diverse workplace and benefits from it as a business. Diversity requires it be open minded and deal with co-workers, job applicants, customers and suppliers without regards to their race, religion, sex, sexual orientation, gender identity, national origin, age, disability or other status protected by applicable law.

Harassment and bullying, child labour, physical abuse etc. erode trust and are unfair treatments, contrary to the ethos of AESSEAL®.

Commitment to business integrity is clear and unequivocal; dishonest practices distort markets and waste resources. AESSEAL® condemns corrupt and fraudulent practices and requires transparency, integrity and honesty in all aspects of its business.

Should any unethical business practices be discovered, employees at all levels are able to report them, either directly to the compliance committee, or through the independent hotline run by Expolink on 0800 374199. This number is widely available throughout the business with posters placed on notice boards and found within the Q-SEAL electronic management system.

In 2020 AESSEAL plc achieved certification for Information Security Management System ISO27001. ISO27001 helps AESSEAL colleagues to ensure the secure management of the information, business processes, information systems and facilities that support its products and services.

“Commitment to business integrity is clear and unequivocal.”



The following policies can be found within the AESSEAL® corporate website:

- Anti Bribery & Corruption Policy:
www.aesseal.com/en/resources/industry-guides/anti-bribery-and-corruption-policy
- Human Rights Policy:
www.aesseal.com/en/resources/industry-guides/human-rights-policy
- Ethics Policy:
www.aesseal.com/en/resources/industry-guides/ethics-policy
- Gender Pay Gap:
www.aesseal.com/en/resources/industry-guides/gender-pay-gap
- Modern Slavery Policy:
www.aesseal.com/en/resources/industry-guides/modern-slavery-policy



6 Supporting Our Community

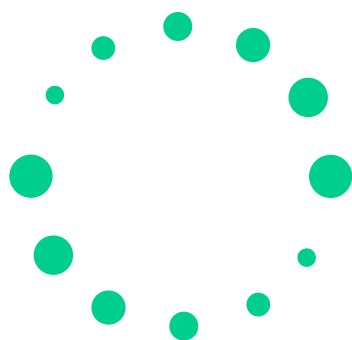


Being a good neighbour and a useful member of the communities in which the business operates remains key to maintaining relationships with vital stakeholders and providing long-term stable employment and career paths for local residents. The facilities have minimal negative impact on the areas in which they operate and more than outweigh and mitigate any negatives through the community benefits that are provided.

6.1 Betterworld.Solutions

Betterworld.Solutions is a crusade to encourage businesses to adopt a policy that favours investments that make a positive impact on the environment while delivering an acceptable return on the investment.

The Betterworld.Solutions website was launched in 2020 and encourages visitors to not only download the policy but also share on the website any examples they have of where they have helped their customers reduce their impact on the environment.



Betterworld. Solutions

6.2 Charitable Donations

Charitable donations are made through the business within the constraints of ethical behaviour to avoid any inappropriate use or conflict of interest.

Further demonstrating its continuing commitment to supporting local communities, AES Engineering has set up a number of funds administered under the stewardship of the South Yorkshire Community Foundation. These schemes include the AESSEAL® Charitable Trust Grassroots Endowment Fund for South Yorkshire and the AESSEAL® Charitable Trust Discretionary Fund. These sustainably contribute towards local causes for years to come. Benefactors have included a wide range of local charities, education establishments, and young people's sporting clubs.

In 2020, a total of £87,939 was donated to charities in the South Yorkshire area alone from the fund.

Separate from any of the charitable efforts by the Company, employees are encouraged join in with activities and events such as dress down Fridays and bake sales. Money raised from these events is often donated to charities that employees have chosen to support.

These activities are carried out in many of the Company's locations globally.

South Africa supported Kosmos 3 in 1 Marathon in Secunda - the company provided a water point in the marathon. The 'We are Africa' theme along with help from a local high school cheerleading team led to AES winning a 'best water point' award from the marathon organizers. In addition our business in South Africa continue to support the 'My Maths Buddy' project with the Nelson Mandela primary school in Sasolburg. The benefits of this project were demonstrated when Grade 7 Math teacher from the school was awarded 'Best performing Teacher' for 2019 and the schools received the award for the best performing school in maths among 90 primary schools in the Fezile Dabi district. See page 28 for further information.

Our USA office gave to Mane Support by donating items towards their 'From Loss to Learning' curriculum for children ages 5 to 12. Gifts went towards assisted grief counselling.

“In 2020
a total of
£87,939 has
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to charities
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EXPERIENCE THE EXCEPTIONAL



6.3 Nelson Mandela Primary School is winning with My Maths Buddy!

Executives of AESSEAL® and AESPUMP® adopted a primary school in Sasolburg in 2018. In 2020 the My Maths Buddy Project returned to the school to work with the Grade 5 learners.

The focus was to get them through training and equip them with the vital tools that will help them increase their understanding of maths, thus creating better results.

We strongly believe that understanding of any subject under study comes first before one can successfully apply it. This is what our project concentrates on - to give maths teachers and learners the tools with which they can have an excellent understanding of Maths.

The Best Performing Maths Teacher Award

"More than 50% of our learners are performing at 80% and above. Your strategies and methods are of great importance to SMT and teachers. The resources you gave the school during your 2018 visit are used on a daily basis and our learners are performing very well in Maths and related subjects.

In addition to that our Grade 7 Maths teacher has been awarded the BEST PERFORMING TEACHER FOR 2019 during the ceremony held by the MEC of the Free State in collaboration with the Fezile Dabi district under 'Primary well done function'. On that note our school also received an award for best performing school in maths among 90 primary schools in the whole of Fezile Dabi district including Ex Model school." - Principle of Nelson Mandela Primary School, Ms. Chabela.



6.4 Community Investment

As a manufacturer and business-to-business supplier of industrial goods, it has sometimes been a challenge to get the brand known to local residents who are not already involved with the business.

This is addressed through community investment. This includes a long-term sponsorship arrangement with the Rotherham United Football Club stadium which is a hub for community events and activities.



6.5 Trust Champion In Business

AESSEAL® is committed to responsible business practices and as such was honoured in the national Lord Mayor's Dragon Awards for Business of Trust. The award recognises companies which are helping to create 'a lasting legacy of better business trusted by the community'. The Company was selected from a prestigious shortlist which included a global investment management corporation, international communications company and a major retail bank.

Managing Director of AESSEAL®, Chris Rea, said: "Our company ethos since 1979 has been to develop, support and value our staff, from our newest apprentices to our world-class engineers and innovators.

"We provide a powerful role model, particularly to younger companies and SMEs, by sharing the AESSEAL® story of integrity, ethics and care for its people and the wider community.

"I am particularly delighted to see the efforts of my brilliant colleagues rewarded by being named Business of Trust Champion, as all the other finalists are such high calibre businesses."



“The award recognizes companies which are helping to create ‘a lasting legacy of better business trusted by the community’.”



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To experience the exceptional, please contact your local representative. Discover full details on our website:

www.aesseal.com



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