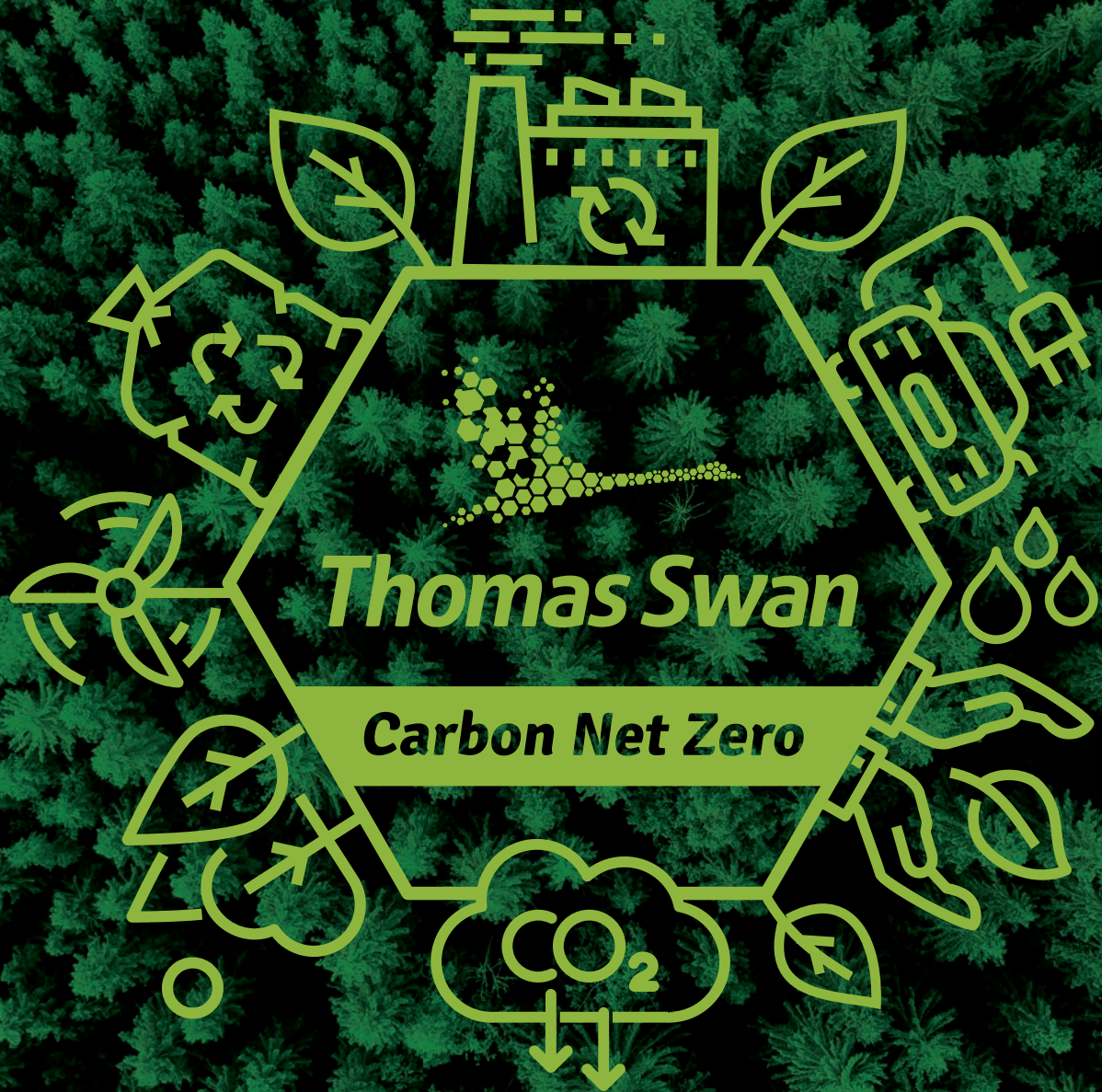




Thomas Swan



Sustainability Report

January - December 2019



Welcome

to our fourth edition of the Thomas Swan Sustainability Report.

Welcome to our fourth Sustainability Report where we look back at our performance against our sustainability targets during 2019. As always, we have included both the successes and the failures as it is important to celebrate progress but also be aware of the challenges that need to be addressed.

Although the Covid-19 pandemic has occurred predominantly during 2020, I feel compelled to mention it here due to the extraordinary experience of what scientists are calling the “Anthropause”. Human activity was largely brought to a halt due to the virus, providing a rare opportunity to monitor the subsequent effect on the environment and wildlife around our planet. Seas were clearer, the sky was blue and the air cleaner. The Himalayas could be seen from parts of India for the first time in 30 years due to reduced air pollution. For me, this period demonstrated how much mankind’s activities negatively impact our planet and that drastic measures can improve things. Of course, we cannot expect to cease all human activities for years on end to fix the damage we have caused. Instead, we must take this moment of clarity as proof that we can make a positive difference if everyone acts and double our efforts to reduce emissions, increase recycling and continuously reduce our impact on the environment.

At Thomas Swan, 2019 saw a few notable successes. A 14% reduction in gas use, an 8% reduction in waste, maintenance of our EcoVadis Gold status and our accreditation to the Investors in People standard. However, we also slipped in other areas such as a 19% increase in our VOC emissions and two accidents and one incident in the year. I am also disappointed that we have not been able to source 100% of our electricity requirements from a renewable source. We will therefore celebrate any progress but increase focus on areas that need it over the coming year. As I regularly point out, sustainability is a journey and we have already come a long way since we started, despite having many challenges ahead of us.



HARRY SWAN
CHIEF EXECUTIVE OFFICER



As I regularly point out, sustainability is a journey and we have already come a long way since we started, despite having many challenges ahead of us.

HARRY SWAN



Sustainable development 17 goals to transform our world

In 2015, the United Nations established 17 key global sustainability goals that provide developmental targets for businesses and individuals alike to work together to end poverty, protect the planet and ensure prosperity for all.

At Thomas Swan, we aim to ensure that our sustainability targets correlate with many of the UN goals and play our part in protecting our planet (www.un.org/sustainabledevelopment/sustainable-development-goals).

Where one of our targets aligns with a UN goal, you will see the UN symbol displayed alongside it.



Developing our people

Helping us to grow through continuous personal development and improved communications



Our people are an essential element in creating a sustainable future for our company. Not just by encouraging them to engage in our sustainable initiatives, but also by supporting the development of their skills and ensuring high levels of job satisfaction and therefore employee retention.

5 YEARS



of world-recognised
Investors in People Standard

2.3



training hours
per employee per month



Our targets for 2019 were as follows:

Achieve Investors in People Status

Following a rigorous audit we are pleased to announce we are now officially accredited as an Investor in People organisation. Organisations that meet this world-recognised Investors in People Standard reflect the very best in people management excellence. This is an important recognition of the significant effort we have put into developing our people over the past 5 years.



Achieve a target of two hours a month training per employee

Our people are our most valued asset. It is essential to ensure that our teams are equipped with the skills and knowledge needed to tackle both current and future challenges. We are proud to say that we achieved this target once again in 2019, scoring an average of 2.3 training hours per employee per month.



Introduce Personal Development Reviews for everyone

Every year all employees should have the opportunity to have a constructive conversation with their line manager on their personal development and aspirations for their role, as well as to hear feedback on how they are doing. Our 2019 target was to achieve 100% return on Personal Development Reviews (PDR's). We achieved 98% returns on PDR's. While this is an improvement on previous years, we will still strive to achieve 100% returns in 2020.



Returns on PDR's

Strive to take on apprenticeships to maintain skills within the business

A vital component in any sustainable business is the development of skills for the long-term and apprenticeships are a natural way to achieve this. During 2019 there were no opportunities identified within the business to take on an apprentice, but we are planning to recruit an apprentice into our Research and Development team in 2020.



Achieving operational excellence

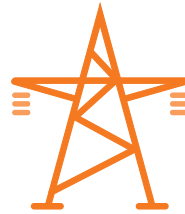
Setting world-class standards within our everyday operations

Sustainability reaches into every aspect of how we work, from reducing waste and resource usage throughout our processes and systems, to the way we train and encourage our people, and how we ensure that they work in a safe and productive environment.



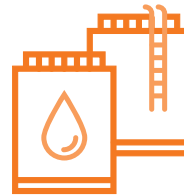
Gas

▼ **14%**



Electric

◊ **0%**



Water

▲ **5%**



Our targets for 2019 were:

Achieve 5% reduction in waste across the site

The ongoing reduction of waste is a key target for our business. In 2019, the volume of waste produced fell by 8% to levels last achieved in 2017. We will continue to work hard to further reduce our waste levels across the business.



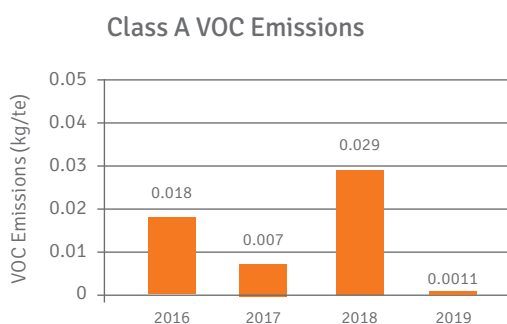
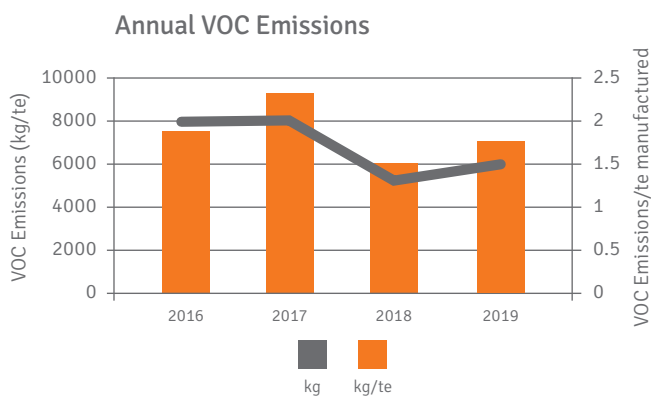
Achieve 5% reduction in utilities across the site (gas, water, electricity)

Our complex operations require a range of utilities, with variable consumption depending on the products being manufactured. 2019 saw a 14% reduction in gas consumption and a 5% increase in water use. There was no significant change in our electricity consumption.

Utility	2018 (te)	2019 (te)	Difference (%)
Gas (MWhr/te product)	5.13	4.42	-14
Electricity (MWhr/te product)	1.39	1.38	0
Water (te/te product)	15.93	16.71	5

Achieve year-on-year reduction in VOC emissions

Disappointingly, in 2019 VOC emissions increased by 19%. We will review why this happened and what we can do to reduce our emissions in 2020. We did however achieve a significant reduction in our Class A VOC emissions.



Achieve zero injuries

We believe a key aspect of sustainability is that all employees, contractors and visitors should leave the company in the same condition in which they arrived. This means we always aim for zero accidents and incidents across the company. As a family business we take this responsibility very seriously. Unfortunately, in 2019 there were two accidents. We have investigated the root cause of these accidents and have taken steps to prevent them from happening again.



Achieve zero incidents

We classify an incident as any event that has a detrimental impact on health, safety or the environment. In 2019 we had one incident under this classification. Our established near miss reporting scheme is used proactively to reduce the probability of the occurrence of accidents and incidents.

Identify suitable benchmark or criteria for world-class assessment

- Gemba boards installed in all areas
- 5S – achieved in all office & communal areas
- 5S – achieved in 50% of all operational areas

Gemba boards have now been installed in all areas and a timetable for meetings has been published. Staff are encouraged to visit Gemba boards in other area of the business to encourage inter-departmental working and communication flow. The 5S principle is now being adopted site-wide with noticeable positive results.



Embracing sustainability

Setting targets that exceed industry standards

Setting targets, and measuring results against those targets, will help us stay on course with our sustainability journey. Ultimately, we want to be a company that lasts for many more decades and has a positive impact on the environment. These initiatives are designed to help us achieve our goals.



2019

Internal Sustainability Awards



5%

Average improvement in the sustainability criteria score

Our targets for 2019 were:



Maintain sustainability awards

Annual internal sustainability awards were launched in 2016. These recognise, encourage and reward ideas from employees that improve the sustainability of the company. The awards continue to be successful and winners were presented with certificates and prizes at the 2019 company summer BBQ. Promotion for the 2020 awards is now underway.



Ensure financial leveraging remains below 25%

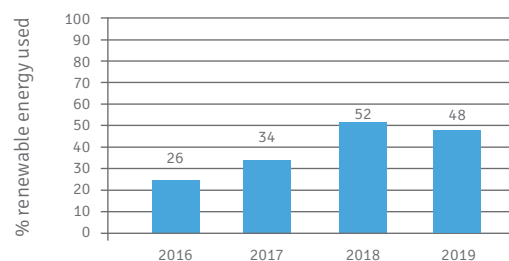
Despite significant investments across our business that required some bank financing, we still achieved our self-imposed target of maintaining leveraging below 25%.



Achieve 100% renewable electricity on site

We continue to work towards this target however, in 2019 we only used 48% renewable electricity because of operational issues with the Anaerobic Digestion plant. While we do not own the AD plant, we understand that the owners have developed a programme of work to address the issues.

Renewable energy usage



Maintain sustainability criteria and improve the score for our top 3 products by an average of 5%

In 2019 we did not improve the sustainability score for our top 3 products. Despite this, cross-functional teams have identified process improvements that have been demonstrated under laboratory conditions but were not implemented on a commercial scale during 2019. Further work is therefore planned in 2020.

Create a team to promote recycling by employees at Thomas Swan

A team comprising of staff from across the business has been established and meets monthly. We believe that if everyone makes small changes to reduce, re-use and recycle materials that they handle, a significant improvement can be made. The team will standardise and simplify the recycling of office wastes on site as one of many planned initiatives.

Commence a community project

We have committed to help maintain the footpaths around the perimeter of the Consett site which are used by local residents. We have also committed to continuing our membership of the Business Friends of Beamish scheme at Beamish Museum.

Develop a plan to achieve net zero carbon by 2030

Thomas Swan has now committed publicly to achieving net zero carbon emissions by 2030. To do this, we must develop a strategy and road map to ensure we set ourselves appropriate targets and monitor our progress against them. The first step in this journey is to measure our current carbon footprint accurately. The Carbon Trust has been engaged to measure our current carbon footprint and will issue its report during 2020. We will use their report to develop a plan to reduce our carbon emissions as quickly as possible. We will feed back our progress against this ambitious target in these annual sustainability reports.

Strategically targeting markets

Developing our business and profile through our sustainability credentials

We want Thomas Swan to be the supplier of choice for customers who share our commitment to sustainability. This means promoting and enhancing our credentials as well as developing innovative new products and solutions.

We secured new business due to our sustainability credentials 

We have rolled out a procurement strategy and contacted all our key suppliers 



Our targets for 2019 were:

Secure new business due to our sustainability credentials

We were delighted to hear that one of our key tyre customers (Pirelli), has given significant weighting to sourcing from Thomas Swan due to our sustainability credentials. This is an excellent demonstration of the commercial advantages of being a sustainable company.



Investigate sustainable procurement practices

One of the opportunities for improvement identified by Ecovadis in the 2018 audit was to implement a procurement strategy. A procurement strategy is designed to ensure that our top 20 suppliers of goods and raw materials are also addressing sustainability within their organisations and agree to our supply criteria. We are pleased to report that we have rolled out a procurement strategy and contacted all our key suppliers. We have had a very positive response from all but one of our suppliers contacted. Where possible, we will prioritise supply from suppliers who meet our criteria in accordance with our procurement strategy.



Maintain Ecovadis Gold status



In 2017, Thomas Swan was awarded gold status from Ecovadis for the first time. We are delighted that we achieved our goal this year by maintaining our Ecovadis Gold status. This is an excellent result and demonstrates our continued commitment to sustainability through an independent assessor. The Ecovadis certification scheme requires continuous improvement in the sustainability of our business and ensures we remain focussed on our long-term survival and reducing the impact of our activities on our planet.

ecovadis



Developing an innovation-driven culture

Adding value through innovation

We are putting the excellent ideas submitted to us from our employees into action. Our people, and their input on how we work, are an invaluable resource for Thomas Swan. We are continuing our journey to develop a culture where innovation is encouraged, recognised and celebrated.



2019

Employees recognised for innovative ideas



28%

of approved employee ideas implemented



Our targets for 2019 were:

Maintain innovation awards

Promotion for the 2020 awards is now underway following the success of last year's innovation awards.

The awards are designed to celebrate success and to show our employees that we are listening to and implementing their ideas. Winners will be presented with certificates and prizes. Last year's innovation awards included ideas such as an environmentally, cost-effective and innovative method to perform oxidation chemistry, the development of an in-process test method for Pepton and repurposing of existing lab equipment.

Achieve successful implementation of 20% of approved new ideas from employees

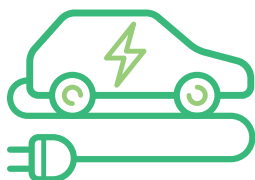
We believe that our employees are best placed to identify improvements that could be made both in their work areas and within the wider business. In 2019, the system that we designed and implemented to capture and process ideas from our employees put into practise 28% of suggestions, exceeding our target of 20%.

Playing to our strengths

Promoting the values that underline our drive for sustainability

Increase

in employees switching to electric vehicles



We want Thomas Swan to be the supplier of choice for customers who share our commitment to sustainability. This means promoting and enhancing our credentials as well as developing innovative new products and solutions.

Support

careers in STEM through staff visits to local schools and colleges



Our targets for 2019 were:

Promote our existing sustainability credentials

The company presentation and our annual Sustainability Report is given regularly to customers, suppliers and potential collaborators, to emphasise that sustainability is at the heart of our business. Our CEO, Harry Swan, also talks regularly at events linked to sustainability, to share the company's sustainability journey.



Increase the number of employees switching to electric and hybrid cars

Whilst this document was being published, one employee has switched to an electric car and several others are actively investigating switching to electric vehicles. Following the Government's 2035 target to ban the sale of new petrol, diesel and hybrid vehicles we will update this target for 2020 away from hybrid car use.

Encourage and facilitate work experience student visits to Thomas Swan



Students can apply on our website for work experience opportunities. A proactive approach now ensures that the students who take part in work experience receive a high quality and relevant programme. In 2019, five students completed work experience at Thomas Swan in the Finance, Operations and Research areas of our business.



Promote careers in STEM to the local community (schools, colleges etc.)

2019 has seen an increase in the company's outreach activities with local primary schools, secondary schools, colleges and universities. Some highlights from 2019 were:

- Harry Swan, our CEO, has collaborated with the Centre for Industry Education Collaboration at the University of York to develop a sustainability teaching programme for primary school aged pupils. The programme is available at no cost to schools and contains real examples of sustainable practices from the chemical manufacturing industry. (<http://www.ciec.org.uk/industry.html>)
- A group of employees have developed a programme of experiments and a site tour for primary school children linked to the National Curriculum.
- R & D staff members have presented at careers fairs for three local secondary schools.
- A group of employees supports site visits for final year chemistry students from Durham University. The employees give presentations, site tours and answer questions on career choices and options.

Targets for the coming year

During 2021, we will continue to focus on the six strategic priorities outlined in the report over five years, monitoring and assessing them from a sustainability perspective, and reporting back to our stakeholders each year.

1. Develop our people

- Achieve target of two hours per month training per employee
- Achieve 100% returns of PDR's by end March 20
- Strive to take on apprenticeships to maintain skills within the business
- Develop a proposal for creating a TSCL Leadership and Management training scheme for staff with potential to lead

2. Operational excellence

- Achieve year on year 5% reduction in waste produced across the site – YTD figure based on 2098t of manufactured product from Jan to May 20
- Achieve year on year 5% reduction in utilities across the site (gas, water, electricity, cryogenic nitrogen) – YTD figure based on 2098t of manufactured product from Jan to May 20
- Achieve year on year 5% reduction in VOC use and emissions – YTD figure based on 2098t of manufactured product from Jan to May 20
- Maintain year on year participation of TSCL staff in the Operational Excellence award
- Achieve year on year 5% reduction in COD in aqueous waste – YTD figure based on 1177te of manufactured product from Jan to Apr 20
- Develop a plan to reduce fugitive heat losses from buildings
- Install 4 electronic Gemba boards
- Increase the number of employees with Green belt qualifications
- Support careers in STEM within the local community (schools, colleges, etc.)

3. Embracing sustainability

- Maintain year on year participation of TSCL staff in the sustainability awards
- Ensure financial leverage remains below 25%
- Maintain year on year improvement in renewable electricity use on site
- Improve the efficiency of TSCL top 2 products (PCMX and Pepton).
- Develop a plan to achieve zero waste to landfill by 2030
- Develop a roadmap to achieve Carbon Net Zero by 2030 objective

4. Strategically target markets

- Secure new business as a result of our sustainability credentials
- Maintain EcoVadis gold status
- Investigate and implement improvements in areas identified by EcoVadis in the 2019 audit:
 - Develop and communicate a sustainable procurement policy
 - Environment, labour and human rights, ethics

5. Innovation-driven culture

- Maintain year on year participation of TSCL staff in the innovation awards
- Achieve successful implementation of 20% of approved ideas from employees
- Perform feasibility studies of new technologies to improve TSCL manufacturing capabilities targeted at reducing TSCL environmental impact

6. Play to our strengths

- Develop a stakeholder communication plan to achieve the Carbon Net Zero target by 2030
- Encourage and facilitate work experience student visits to Thomas Swan
- Increase the number of employees switching to electric cars

