

## Servomex: Pioneering gas analysis and empowering a sustainable future

By Anthony Wright on Jul 13, 2023 | 200

NEWS | SUSTAINABILITY

In a world driven by technological advancements and an ever-increasing demand for environmental consciousness, the importance of accurate gas analysis cannot be overstated. Enter Servomex, a leading global provider in gas analysis solutions, revolutionising industries and paving the way for a sustainable future.

With a rich legacy spanning over six decades, Servomex has established itself as a trusted name in the field of gas analysis. Combining cutting-edge technology, industrial expertise and a commitment to sustainability, this innovative company has become a catalyst for progress across various sectors.

The company's core mission revolves around enabling industries to optimise their processes, enhance product quality and improve safety standards through precise gas measurement and analysis. Offering a range of advanced gas analysers and systems tailored to meet the unique requirements of diverse industries, Servomex manufactures and supplies solutions for petrochemical, industrial gases, power generation and pharmaceuticals, amongst others.

One standout aspect of Servomex's ethos is its dedication to sustainability. Acknowledging the pressing need for a cleaner and greener future, the company has embarked on a comprehensive sustainability campaign, incorporating environmentally responsible practices into every aspect of its operations. From eco-friendly manufacturing processes to energy-efficient product designs, Servomex aims to lead the in minimising its environmental impact.

The company is also actively engaged in assisting its clients in achieving their sustainability goals. By equipping them with advanced gas analysis technologies, the company empowers industries to optimise their resource consumption reduce emissions and ensure compliance with stringent environmental regulations. Through these efforts, Servomex contributes to the global mission of mitigating climate change and fostering a sustainable world for future generations.

In this article, we delve deeper into the company's gas analysis solutions, explore the diverse range of services it offers, uncover the various dimensions of its sustainability campaign and examine the scale of the challenges that lie ahead.

Founded in 1952, Servomex – a Spectris company – offers accurate and reliable gas analysis solutions for hazardous and safe area applications, including ultra low detection and portable products.

Intent on delivering a bespoke solution, the company aims to cater for a range of needs, whether a customer requires a single analyser and sampling system or multiple gas analysers working together in an air-conditioned shelter.

Its products include the SERVOTOUGH range, which is built to meet the challenge of hot and hazardous gas analysis environments. Optimised for use in hazardous areas, these analysers utilise both extractive and in-situ analysis techniques. Key gas measurements include continuous monitoring of oxygen, light hydrocarbons, combustibles and emissions gasses.

Conversely, the SERVOPRO range utilises its portfolio of non-depleting gas sensing technologies including paramagnetic, zirconia, flame ionisation detection, plasma and gas chromatography.

This range is ideally used for syngas, hydrocarbons, or trace gas mixtures or providing multi-gas monitoring capabilities for continuous emissions monitoring systems or air separation unit (ASU) plants.



The SERVOTOUGH Oxy 1900.

For ultra high purity (UHP) gas analysis, Servomex offers its SERVOPRO ULTRA series while SERVOFLEX analysers provide a portable solution for safe or hazardous area use.

Although designed for a range of different applications, its technologies and services aim to reduce the environmental impact of its customers to tackle environmental degradation and climate change.

Having already embarked upon its sustainability programme, the company has committed to reaching Net Zero carbon across its organisations by 2030 and across its value chain by 2040 as part of a coordinated activity across the Spectris group.

Through its partnerships with leading organisations such as EcoAct and EcoVadis, the company continues to validate the effectiveness of the activities within its sustainability programme and its Net Zero targets have been validated by the Science Based Targets initiative (SBTi).

Speaking with **gas**world, Mike Proctor, Director of Sustainability and Strategic Product Development at Servomex, outlined the Group's goal when it comes to Net Zero.

"The headline of the Spectris sustainability mission is to achieve Net Zero targets, which everyone has signed up to in order to get our Scope 1 and 2 emissions down to Net Zero by 2030 and get our Scope 3 emissions down to Net Zero by 2040," he explained.

The company's focus on promoting sustainability has so far yielded positive results – last year Servomex was granted a Gold Star rating by EcoVadis for its sustainability, putting it into the top 7% of all 100,000 companies that are listed.

The focus on reducing emissions has also been driven by the increased drive by some of its biggest customers to reach Net Zero – a demand that has been increasing as 2030 and 2050 nears ever closer.

Revealing that the company achieved a much better rating that he would've expected first time around, Proctor believes Spectris achieved a gold standard largely due to the strength of the Group's corporate governance ethics programme, to which he attributes them scoring above average.

## Pillars of sustainability

Comprising three key pillars, Servomex's sustainability strategy focuses on Environment, Operational and People.

In addition to zeroing in on attaining Net Zero targets, the Environment pillar encompasses the need to sign up to the Taskforce for Climate Related Financial Disclosure (TCFD), which is mandatory reporting to assess how resilient a business is to

the effects of climate change.

It also includes an initiative called green teams, which essentially looks at minimising energy waste and raising awareness of related methods.

"Green teams make sure that you engage the workforce to come up with ideas to minimise waste, to minimise electricity consumption because a lot of people want to do this and at home you don't have a great deal of opportunity."



Servomex was awarded the coveted EcoVadis Gold Rating 2022 for its business sustainability ratings.

"You can make a lot more difference being in a green team in your organisation that you can being in a green team of one at home, so to speak."

The group's second pillar, Operational, is principally about making sure its supply chain is sustainable, both on the environmental impact side but also from the ethics side, which encompasses anti-bribery, corruption, anti-slavery and trying to manufacture as locally as possible.

"That's another element of it, just realising the large component of your carbon footprint will be associated with transportation. It's ethical, it's environmental impact and it's STEM. In the places where we operate, we try to bring people much closer to our business. We like to work with our supply chain in partnership so hopefully people can mutually benefit from cultural understandings," explained Proctor.

This work ties in with the company's third pillar, which revolves around People. Within this pillar, Servomex endeavours to support STEM initiatives through its specialist foundation, which also acts as a 'well endowed' foundation for investing in charities around the world and working with schools to promote STEM activities.

"This also helps to get people who wouldn't normally be interested in engineering professions," he said.

## Challenges

Meeting the ambitious goal of Net Zero emissions has become a paramount challenge for governments, organisations and individuals alike in the face of climate change. This endeavour involves not only reducing direct emissions, known as Scope 1 emissions, but also addressing indirect emissions from purchased energy – or Scope 2 emissions – in addition to emissions arising from the entire value chain, or Scope 3 emissions.

## Scope 3 – which is not until the end of 2040 – is going to take a serious overhaul of the business.

Each scope presents unique hurdles that must be overcome to achieve a sustainable and decarbonised future.

"Scope 3 is much more difficult because that's your whole supply chain and your whole 'in-use' phase and recycling, that's the whole lifecycle," said Proctor. "It's much easier to control the activities you do at 1 or 2, for which we have a very solid plan."

"Scope 3 – which is not until the end of 2040 – is going to take a serious overhaul of the business."

Proctor explained that this overhaul would require a range of whole-sale changes. This includes reducing the power consumption of its products by a couple of orders of magnitude and lowering the maintenance requirements and the consumables requirements.

"Thirdly, it would be to come up with a manufacturing process which could be replicated easily in different geographies so that we are able to create portable manufacturing processes so that we can move closer to the customers to eliminate the logistics costs."

Encompassing the entire value chain, including upstream and downstream activities, Scope 3 emissions often extend far beyond an organisation's direct control, making them more challenging to track and mitigate.

Supply chain transparency, collaboration with suppliers and encouraging sustainable practices throughout the value chain are key factors in reducing Scope 3 emissions. However, this requires substantial coordination, data sharing and alignment of goals among multiple stakeholders, making it a complex and multifaceted challenge.

"We are looking to assist our customers in meeting their sustainability strategies and make them successful in that, and also coming to the realisation that adopting more sustainable technology also saves you money," added Proctor.

