

Why Sustainability is Here to Stay and How to Integrate it into your Veterinary Practice

JP Morgan's sustainability rating has been downgraded by Standard Ethics, a sustainability rating agency, from adequate to non-compliant following its involvement in the failed European Super league. Standard Ethics judged both the orientation shown by the football clubs involved in the project and those of the US bank to be contrary to sustainability best practices, which are defined by the agency according to UN, OECD and European Union guidelines, and take into account the interest of the stakeholders.¹ (Guardian, Jasper Jolly 21 April)

What has this got to do with sustainability in veterinary practice? It shows that when sustainability rating agencies exist and banks and football teams are bothered about what a sustainability agency thinks, then we know that sustainability is here to stay.

It's been a long time coming but big businesses and investors are paying a lot more attention to environmental, social and governance data. This became even more obvious when the Business Roundtable lobbying group recently reversed its position, held since 1977, that businesses existed merely to create profit for their shareholders to one where other stakeholders such as the environment, clients, employees and suppliers were also important. It is good to see that corporate greed is being attenuated as more purpose-centred people come into investment banks and big business and challenge the status quo. Hopefully this is a genuine attempt to protect the planet and not just greenwashing and represents a sincere desire towards a sustainability and regeneration agenda and a move to a fairer world. Increasing evidence is also coming to light that those businesses that begin the journey to becoming purpose-centred are more likely to be more productive, retain their team better and be more profitable than businesses who only care about profit.²

Many experts now consider that global warming is the biggest existential threat to humankind. This means that more and more money and expertise is being placed into sustainability budgets to try to solve this intractable problem. It was so important to see that the new president of America made very firm commitments when coming into office and has gone further than expected at the recent G20 summit to reduce greenhouse gases in the USA over the next decade which will be critical to hold temperatures to 2% above pre-industrial levels. There are still climate change deniers, but most people accept that the burning of fossil fuels, the use of potent greenhouse gases in air conditioning and fridge units and the cutting down of mature rainforests are contributing to increased environmental temperatures, rising sea levels, erosion of coastlines and increased prevalence of forest fires.

President Biden re-joined the Paris Agreement for climate change when he commenced his presidency after his predecessor withdrew in 2020. The Paris Agreement came into force on November 4th, 2016 and is a landmark event because, for the first time, a binding agreement brings 196 parties into a common cause to combat climate change and adapt to its effects. The Paris Agreement set an ambitious long-term goal to limit global average temperatures to 1.5 degrees centigrade

above pre-industrial levels. This is dependent on the amount of carbon dioxide and other greenhouse gases that are emitted into the environment. At current rate of use, the excess carbon that will be emitted into the atmosphere over the next decade will take us above the 1.5 degrees centigrade target. There is, therefore, a real urgency to cut emissions. This decade is critical to the legacy and the future that is passed onto the next generation which Greta Thunberg represents so eloquently. Whilst governments can make a difference, it is so important that businesses and individuals work hard and creatively to come up with ways to save carbon, reduce plastic use and live more lightly on the planet.

Sustainability focuses on meeting the needs of the present generation without compromising future generations. The concept of sustainability is composed of three pillars: economic, environmental and social. This is more informally known as profits, people and planet. Deep green activists may talk about saving the planet but not caring for people living in developing countries who actually live much lighter on the planet than the rich west. True sustainability looks for solutions that recognise that all three pillars are important. However, in the past, profit was put above everything and the environment was not considered in the profit and loss data or the balance sheet.

Companies and individuals must now work towards measuring their own greenhouse gas emissions as well as recycling, eating food that has been sustainably produced and with good welfare standards and decreased use of pesticides and fertilisers. Interestingly, what gets measured can then be managed to improve those key performance indices. Only Sweden measures and reports on its greenhouse gases on a quarterly basis. This close attention to this key metric allows them to work hard on bringing in new strategies to keep the emission number going down. Reporting on these figures annually is a bit like getting accounts annually but not keeping management accounts during the year. It is only at the end of the year that the company finds out if it has done well or not. All rich countries measure their per capita GDP growth on a quarterly basis. It is essential that they begin to measure their greenhouse gas emissions quarterly as well to see how well strategies are working to decrease emissions.

The pandemic has, undoubtedly, increased the strength of the sustainability lobby. Many people have spent more time at home and outside listening to birdsong and falling in love with the natural world. There is much to lose! This means that vets and clients will be thinking more seriously about the environment and sustainability. The pandemic has been a time of great sacrifice and sadness but hopefully, in the future, it will be seen as a time when a reset occurred and people were able to consider what was really important and became more careful how they travel, what they eat, and how they can live more lightly on the planet.

How is it Possible to Integrate these Ideas on Sustainability into Veterinary Practice?

The most important attitude to have when trying to bring sustainability strategies into the veterinary practice is to be passionate about it. Veterinary practices are made up of



caring, passionate teams. Most people working in practice care about animals and the natural world. That energy is important to harness to get a whole team approach.

In a recent webinar by Zoe Halfacree from VetSustain a survey was launched about the presence of green teams in a practice. Only 14% of attendees had a green team in their practice but 65% were thinking of creating one. The idea of developing sustainability as part of a practice's ethos is still a recent one. If sustainability is just a theoretical idea by the leader of the practice or a passionate employee it is very likely to fail. Team involvement is essential.

Investors in the Environment is a charity encouraging businesses to be more eco-friendly. There are a number of veterinary businesses already accredited including Davies Vet Specialists, The British Veterinary Association and The Webinar Vet. The Investors in the Environment accreditation system is a good framework to start the journey to becoming more sustainable and covers areas such as energy usage, paper usage and waste management. When thinking about sustainability it is sensible to consider the whole veterinary system of the practice and this is where lobbying is also possible.

When considering suppliers, the practice can ask probing questions about the factories where products are manufactured. Do these factories use renewable energy? Is packaging excessive? Are by-products of production disposed of safely? These questions can be asked before the decision is made to supply the product in the practice.

Once the products are at the wholesalers, are the employees treated fairly at the company? Has the wholesaler invested in green vehicles to transport the product to the practice? Does the wholesaler take back cardboard from packaging to recycle at their warehouse? How are out-of-date drugs and consumables destroyed when sent back to the wholesaler?

These questions do take time and may not be possible for every practice, but they encourage suppliers to do their best because they know their clients are watching them closely.

There is also a lot that can be done within the practice. In fact, it is imperative that we do this since Healthcare Without Harm, an environmental charity, has calculated that if global healthcare were classed as a country, it would be the fifth largest carbon emitter in the world. The veterinary profession certainly must play its part to mitigate against this.

There is a massive amount that can be done with veterinary premises and their grounds. If there is room, consider planting trees and a wildflower meadow to capture carbon and encourage insect pollinators. If space allows, a ground source heat pump can be sited and solar panels can be fitted on suitable roof space. A local practice in Bryn has built a new practice using the German Passivhaus system. This creates a very energy-efficient space.³

The Greener Veterinary Practice Sustainability checklist was launched in March 2021 by Vet Sustain, BVA, SPVS and BVNA. Its objectives are to encourage:

1. Responsible resource use
2. Being sustainable in your operation
3. Using medicines responsibly
4. Sustaining the team

Considering surgical practice can have a big impact on the carbon footprint of the practice. Cloth scrub caps regularly washed can reduce environmental contamination in the operating theatre compared with one-use caps and can also be personalised to help with identification and communications with masks on. Scrubbing up the traditional way can use up to 15 litres of water. In the UK there is plentiful water most of the time but there is also an energy cost to produce this clean water and warm the water up. Alcohol hand preparation is a viable alternative. Stainless steel sterilisation tins are costly to purchase but will last a lifetime and will help to reduce the number of plastic sterilisation pouches. It is also important to consider the use of reusable drapes and surgical gowns over single-use ones.

A recent paper by Vozzola *et al.* at AORN 2020 suggested that using reusable gowns reduced natural resource consumption by 64% and greenhouse gas emissions by 66% compared with disposable gowns.⁴ If there are significant amounts of fluids at the operation site then disposable gowns and drapes may be a better alternative because the polypropylene material is more impermeable.

Separating waste correctly is important since as little as 5% of medical plastic is recycled,⁵ and much of the clinical waste produced by practice is plastic. There is enormous scope for the industry to improve on this. There is a huge problem with plastic pollution. Plastic production is energy-intensive and burning of plastic in incinerators may lead to health problems in people and animals near the incinerators.

Some easy methods to reduce plastic use include reusable sharps bins, changing to Becton Dickinson's Emerald syringe range that uses 30% less plastic than the average syringe, and purchasing a distilled water maker to replace plastic bottles. Recycled plastic for protective collars and rubbish bags is another sensible option.

Perhaps among the most serious greenhouse gases used in practice, however, are the gaseous anaesthetics. Nitrous oxide can remain in the atmosphere for over 100 years and is 36 times more potent as a greenhouse gas than carbon dioxide. There are now very good analgesics that can take its place. Isoflurane is also a potent greenhouse gas.⁶ Low flow anaesthesia using capnography can help to limit this effect.

In the field of large animal practice, we must continue to research how to limit the amount of methane and other greenhouse gases that are emitted by our livestock. Part of the solution seems to be in eating less meat and moving towards more organic, extensive strategies that reduce antimicrobial and anti-parasiticide usage. Recent research has suggested that the addition of small amounts of seaweed can reduce methane production in cattle by over 80%.⁷

Finally, it is worth every practice developing a travel strategy. Is it possible that people can walk, cycle or use public transport to go to work? Also, there is now lots of online training which can help reduce travel to conferences.

The next ten years are a crucial time in society's attempts to sustain and regenerate the planet. Everybody must do their part. Veterinary surgeons should be at the vanguard of this movement to utilise their expertise in clinical and agricultural practices.



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