

Leading **Sustainable** Anaesthesia



Did you know?

Approximately 20% of a veterinary practice's Scope 1 and Scope 2 emissions result from waste anaesthetic gases.

Safe. Sustainable. Easy To Use.

An aerial photograph of a lush green forest. A river winds through the center of the forest, forming a large, stylized 'S' shape. The water is a light blue color, contrasting with the deep green of the trees. The forest is dense and covers the entire area around the river.

At SageTech Veterinary, we are proud to play our part in sustaining our planet.

We offer a safe, sustainable and easy to use solution for the capture, recovery and recycling of environmentally harmful waste volatile anaesthetic gases.

The Problem



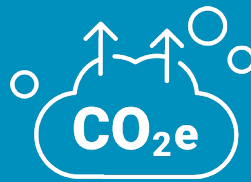
Current veterinary anaesthetic practice allows most waste anaesthetic agent to be directly released to the environment, significantly contributing to the carbon footprint of veterinary healthcare.

Approximately 20% of a veterinary practice's Scope 1 and Scope 2 emissions result from waste anaesthetic gases. As highly potent greenhouse gases with Global Warming Potentials hundreds of times greater than carbon dioxide, they contribute to climate change.



95%

The percentage of volatile anaesthetic gas that is exhaled to the atmosphere as waste¹



74,000

The number of tonnes of CO₂ equivalent (t/CO₂e) emissions (GWP20) released each year in the UK alone from veterinary practice volatile anaesthetic gases²



37,000

The number of return flights from London to New York that would produce the same amount of CO₂e emissions³

Only around 3-5% of the anaesthetic gas that is administered during an operation is absorbed by the patient. This means that 95% is released into the atmosphere as waste, equating to **74,000 tonnes of CO₂** equivalent emissions (GWP20) being released from anaesthetic gas usage in veterinary practices each year in the UK.

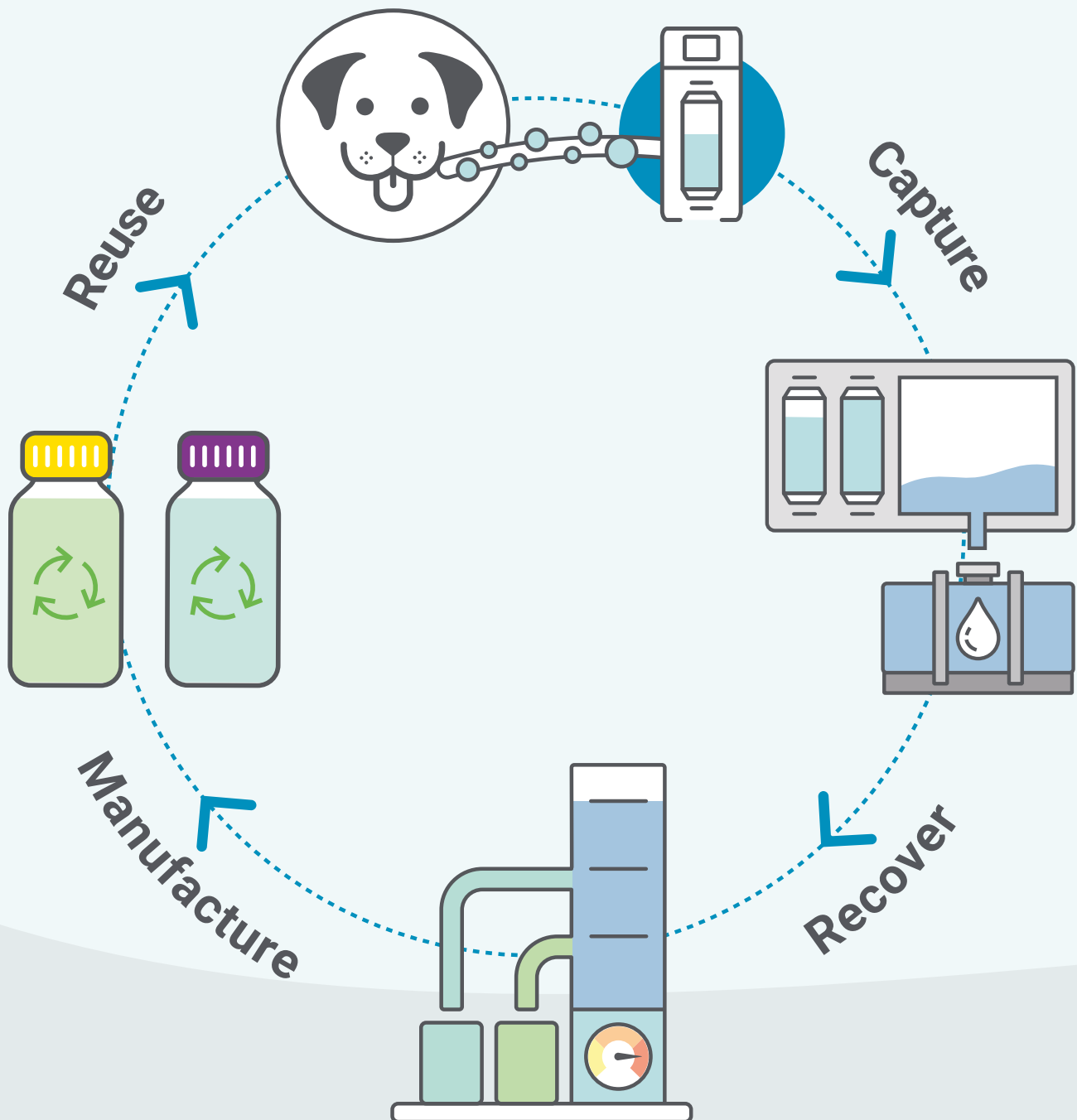
What's more, for many years, end terminal filters have been used to capture waste anaesthetic agents. However, these filters bring a risk of workplace exposure to these harmful waste gases if not closely monitored.



The Solution

Safe. Sustainable. Easy To Use.

SageTech Veterinary provides a fully sustainable, innovative circular economy solution which **captures, recovers and recycles** waste volatile anaesthetic gases. By preventing these gases from polluting the atmosphere, we are providing veterinary practices with a straightforward solution to enable them to make a real difference to the environment.



Our Circular Economy Solution



1. Capture

Our unique solution **safely captures** available waste volatile anaesthetic agents (sevoflurane and isoflurane) onto a **sustainable** carbon filter contained inside a **reusable** capture canister.

2. Recover

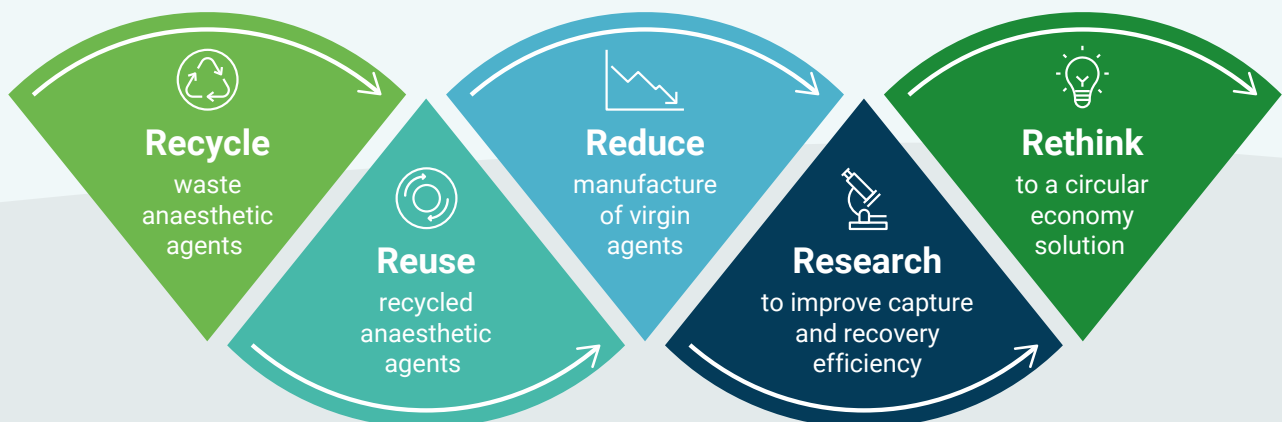
The full canisters are **collected** from veterinary practices through existing logistic channels. The volatile agents are **extracted** from the canisters at our central facility, and then **returned for reuse**.

3. Manufacture

The extracted liquid waste will be **purified for clinical reuse** following approval from the Veterinary Medicines Directorate (VMD).

4. Reuse & Conserve

Collecting and recycling waste volatile anaesthetic agents reduces the significant burden associated with their virgin manufacture and the environmental impact of their release. This completes our circular economy solution and helps protect our planet.



The Product

VET Dock

The VET-Dock is a waste volatile anaesthetic gas capture device specifically designed to be used within veterinary practices. The device houses a single canister that uses a capture material that binds to the volatile agents that pass through the expiratory waste limb of the breathing circuit. The device has been engineered to be simple to install and use, to maintain patient safety and to improve current safety levels for all clinical staff.



Key Benefits

- Simple to install and easy to use
- Compatible with most anaesthetic circuit setups
- Integrates without any alteration to anaesthetic delivery
- Visual and audible safety alarm system that constantly monitors canister fill level to prevent staff exposure
- Easy canister exchange procedure
- Canister exchange every 4-8 weeks (depending on volatile usage)
- Does not impact clinical workflow
- Low maintenance
- Various mounting options to suit user



The VET-Can is a reusable canister that captures available waste volatile anaesthetic agents through adsorption onto a sustainably sourced filter material.

Key Benefits

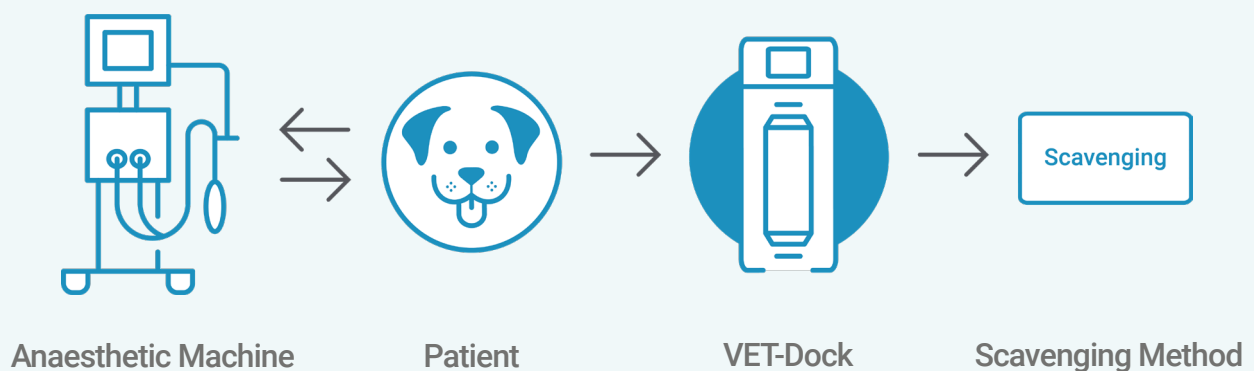
- Reusable, lightweight, and recyclable at end of life
- Safe to handle, store, and transport
- Unique identifier for canister tracking and traceability
- Large capacity for fewer canister exchanges

Each VET-Can is weighed before and after agent recovery, providing data to assist with carbon saving reporting.



Integration

The VET-Dock is easily installed and integrates simply within the exhaust limb of the anaesthetic circuit.



Our innovative circular economy solution encompasses all of our specialist equipment and reliable support services into one package. Please contact info@sagetechnveterinary.com to find out more.

SageTech Veterinary Team

Our UK team provide ongoing user training and technical support to ensure the correct use of the equipment and to help maximise its usable life.

Find out more about SageTech Veterinary and our passion for creating a sustainable, circular economy at www.sagetechveterinary.com.



Contact Us

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References:

1. National Library of Medicine / Environmental and Occupational Considerations of Anesthesia: A Narrative Review and Update
2. Figure taken from market data
3. My Climate / CO2 Emissions Calculator (Based on one round trip from LHR to JFK = 2 t/CO2e)



Innovate
UK

