

Leading **Sustainable** Anaesthesia

Safe | Sustainable | Easy To Use

At SageTech Medical,
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

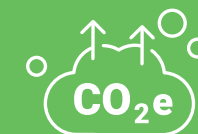
Wasteful. Harmful. Unsustainable.

The manufacture of virgin anaesthetic agents and their eventual release as waste volatile gases is highly damaging to the environment and contributes significantly to the total carbon footprint of healthcare.



95%

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



97,000

The number of tonnes of
CO₂e (t/CO₂e) released every
year in the UK from volatile
anaesthetic gases¹



17,600

The amount of times a car
would travel around the globe,
based on the t/CO₂e released
each year in the UK

There is a real unmet need to reduce the impact of waste volatile anaesthetic agents on the atmosphere in order to protect our environment for future generations.

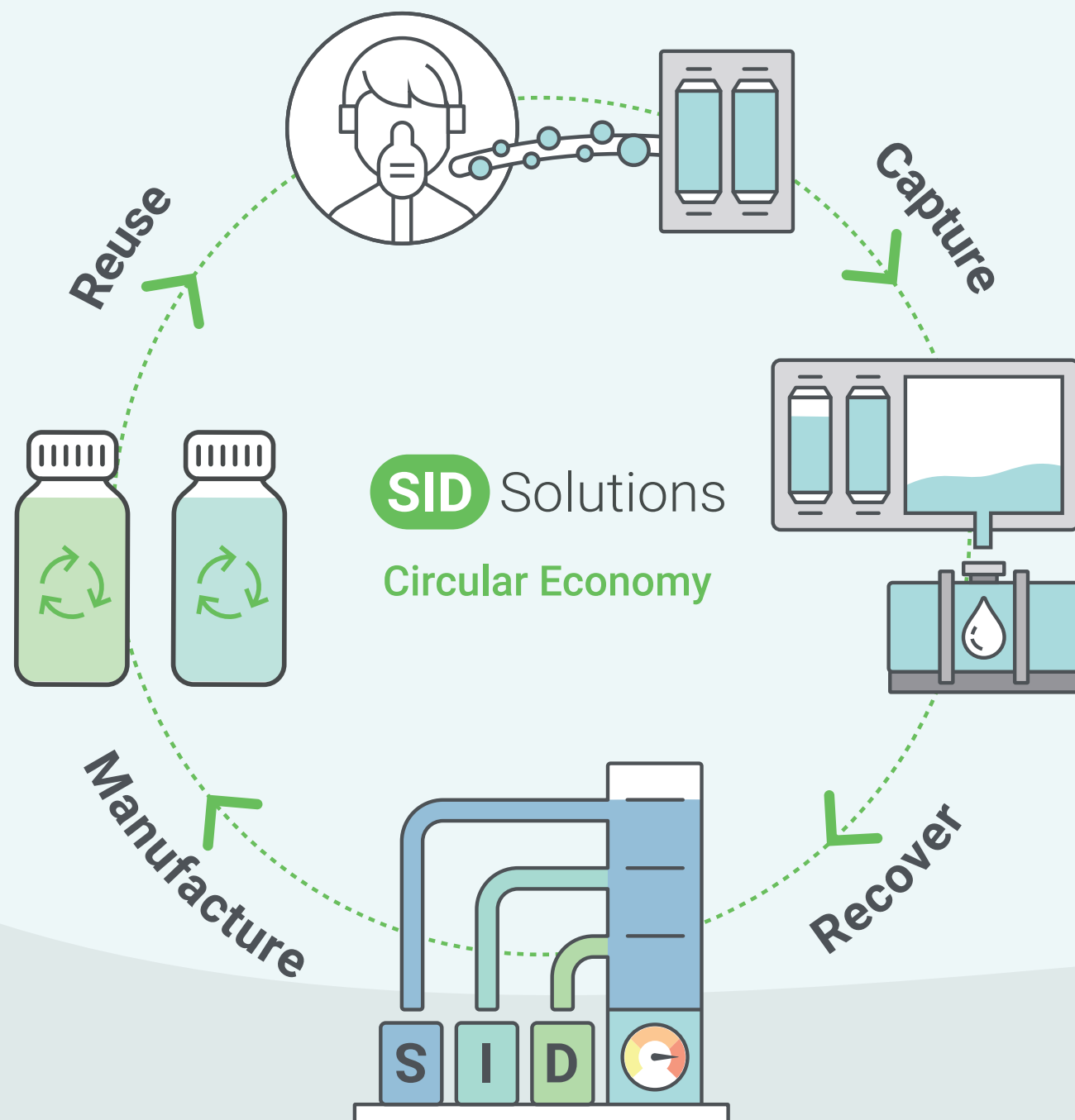
Anaesthetic gases are a priority under Scope 1 for directly controlled emissions in the NHS Carbon Footprint Plan². 2% of all NHS emissions come from these gases³.

With the NHS committed to an 80% reduction in CO₂ equivalent (CO₂e) emissions by 2032², an innovative solution is needed.

The Solution

Safe. Sustainable. Easy To Use.

SageTech Medical 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 hospitals 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 99.9%**⁴ of available mixed waste volatile anaesthetic (sevoflurane, isoflurane and desflurane), through actively controlled adsorption onto a **sustainably sourced** carbon filter contained inside two **reusable** SID-Can capture canisters.

2. Recover

The full SID-Cans are **collected** from the hospital, **emptied** at our regional SID-Hub facilities, and **quality checked** before being **returned** for **reuse**.

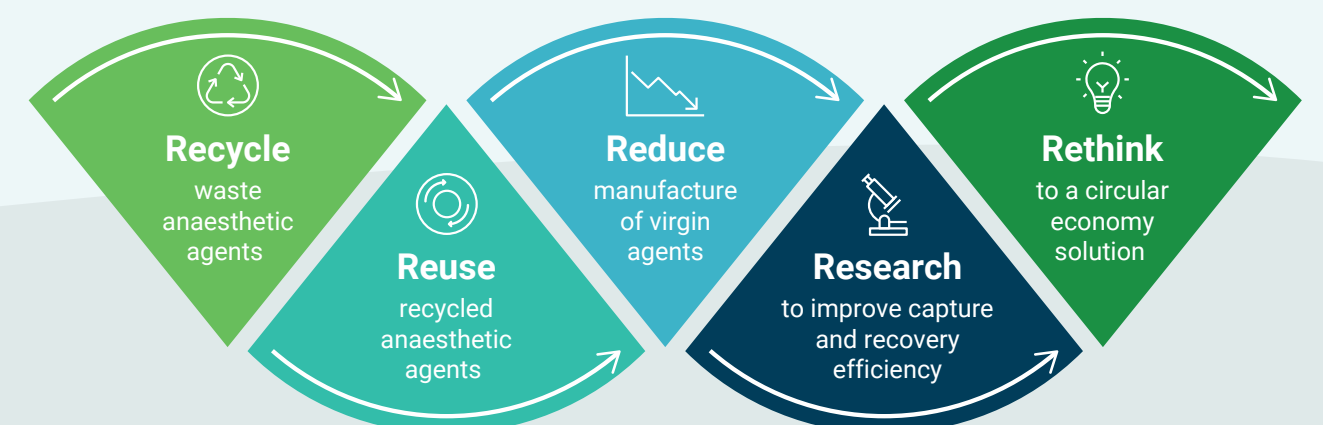
Captured agents are **recovered** from the SID-Cans back into a liquid form using our proprietary SID-Lab technology. The recovered mixed waste is then transported back to our purification and manufacturing facility in Devon.

3. Manufacture

The mixed liquid waste is then **recycled** to yield active pharmaceutical ingredients, for bottling and **reuse**.

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 the health of people and our planet.



The Product

SID Dock

The SID-Dock is a waste volatile anaesthetic gas capture machine, housing two reusable SID-Cans that safely capture volatile agents from the exhaust of an anaesthetic machine. The SID-Dock maintains a safe connection to the hospital anaesthetic gas scavenging system (AGSS) enabling the anaesthetic machine to continue to work in the active AGSS mode, without alteration.

Key Benefits

- Compatible with all major global anaesthetic machine brands
- Integrates into existing anaesthetic equipment without alteration
- Automatic failsafe bypass
- Requires no change in clinical practice
- Intraoperative SID-Can exchange ('hot-swap')
- Touchscreen display with SID-Can percentage fill level and AGSS flow indicator
- Visual and audible safety alarms
- Wall mountable or free standing options
- Low maintenance with self-diagnostics and auto-calibration
- Small and compact design



SID Can

A reusable canister that captures 99.9% of available volatile anaesthetic agents, through actively controlled adsorption onto a sustainable hydrophobic carbon filter.

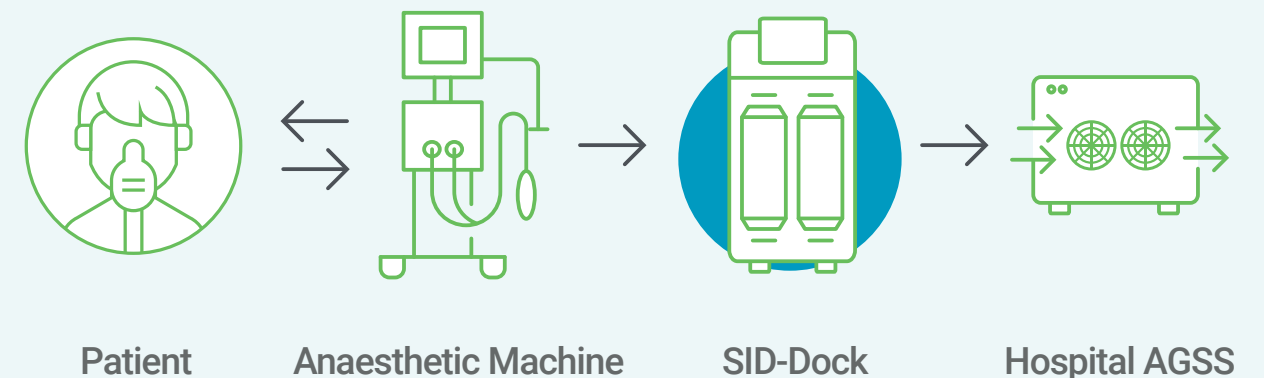
Key Benefits

- Reusable, lightweight and recyclable at end of life
- Safe to handle, store and transport
- Captured agent recorded
- Large capacity for fewer canister exchanges



Integration

The SID-Dock capture system is easily installed and integrates simply, seamlessly and universally between the anaesthetic machine and the hospital AGSS, using British Standard AGSS safety hoses, and requires no change in clinical practice or alteration to the anaesthetic machine.



SID Solutions

Our innovative circular economy solution, known as **SID-Solutions**, encompasses all of our specialist equipment and reliable support services into one package. Scan the QR code to find out more.



Carbon Savings Impact Report

To help understand the impact that our gas capture solution can have on reducing the carbon footprint of your organisation, we offer a free bespoke carbon savings impact report. Request yours now via our website or by scanning the QR code on the right.



SageTech Medical 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 Medical and our passion for creating a sustainable, circular economy at www.sagetechmedical.com.



Contact us

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Follow us



References:

1. Hu, X, et al, Resources, Conservation and Recycling 2021; Volume 167. The carbon footprint of general anaesthetics.
2. Delivering a 'Net Zero' National Health Service. October 2020.
3. Putting anaesthetic-generated emissions to bed. www.england.nhs.uk.
4. Dr Calum Robertson, SageTech Medical. Capture Material Efficiency. (Available upon request).



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