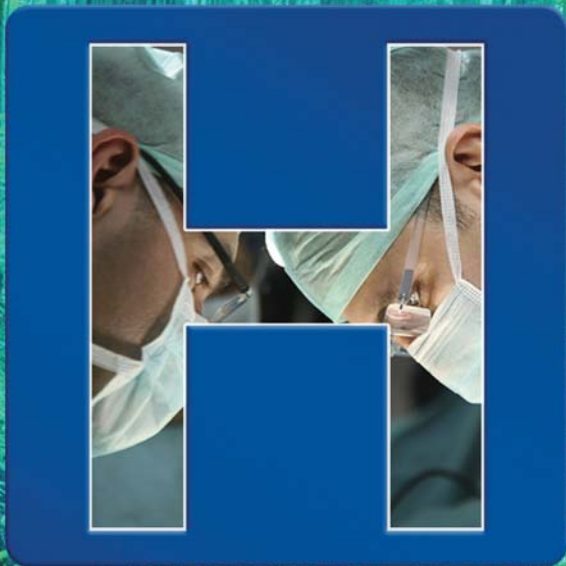


**Deltasorb<sup>®</sup>**

ANESTHETIC COLLECTION SERVICE

Where is your  
unused  
Anesthetic Gas  
going?



Capture toxic,  
greenhouse  
gas emissions  
with Deltasorb<sup>®</sup>

*Saving our neighborhoods... every day!*

blue  zone

Greening Anesthesia Solutions

# STOP emissions of toxic anesthetics into the atmosphere with Deltasorb®!

## The Facts

A mid-sized hospital's annual emissions of inhalation anesthetics into the atmosphere...



equates to roughly **400 cars...**



offset by **125,000 Trees...**



or the **Deltasorb®**  
ANESTHETIC  
COLLECTION  
SERVICE

## Did you know...

- **Toxic anesthetics are vented to the outdoors**  
During surgery, less than 5% of the total administered anesthetics is metabolized by the patient and the remaining 95%, recognized as an occupational health & safety hazard, is routinely vented outdoors through the specialized operating room air scavenging system.  
This is a huge challenge for both the medical community and general public.
- **Vented anesthetics impact air quality and human health issues**  
Once vented from the hospitals to the atmosphere, the anesthetics, being stable halogenated ethers, are:
  - Toxic and potentially lethal when inhaled in high dosage
  - About 7 times heavier than air and drop down to ground level having a direct adverse impact on air quality and human health issues in hospital neighborhoods
  - Potent greenhouse gases that have a 20 year global warming impact up to 3,766 times greater than CO<sub>2</sub>
- **The effect on climate change is significant**  
One average size hospital annually releases emissions equivalent to about 400 cars. To offset these emissions, each hospital would have to plant approximately 125,000 trees per year.
- **Anesthetic emissions are expected to double**  
The global anesthetic market grows about 10-15% per annum – therefore doubling every 7-10 years, and so do the emissions of vented anesthetics.
- **Expensive premium anesthetic gases have no alternative supply**  
Premium anesthetic gases, commonly used by hospitals in the developed world are among the most expensive drugs with no alternative supply forthcoming. In fact, the supply of a leading anesthetic, used in over 50% surgeries in North America is monopolistic and single-sourced.

# Deltasorb®

## ANESTHETIC COLLECTION SERVICE

The Deltasorb® Anesthetic Collection Service is a solution for hospital operating rooms that prevents the routine venting of destructive inhalation anesthetics into the atmosphere. This service also secures a new supply source for generic anesthetics.

The Deltasorb® Anesthetic Collection Service is based upon the use of a portable stainless steel Deltasorb® canister that is delivered and exchanged weekly to hospitals for a nominal monthly service fee. The anesthetic emission reduction is constantly monitored and reported.

Trained operating room staff install the canister onto the exhaust hose of the scavenging system prior to venting.

The Deltasorb® canister uses a sieve-like filtering matrix known as Deltazite® to selectively adsorb each anesthetic gas as it passes through the canister prior to being vented to the atmosphere.

When the canister is returned to Blue-Zone Technology, the captured anesthetics are extracted from the Deltazite®, liquified and processed into medical grade anesthetics.

The Deltasorb® Anesthetic Collection Service enables a complete cradle-to-cradle environmental stewardship in anesthesia delivery.

This technology will revolutionize hospital operating rooms and provide a safe and environmentally friendly way to handle venting of harmful anesthetic gases.

## Helping hospitals to go green

Blue-Zone Technologies Ltd. is a growing private Canadian company which is commercializing the innovative Deltasorb® technology, globally.

The company's growth to date has been funded mainly by private capital, the support of the federal government's Sustainable Development Technology Canada (SDTC) program and also in-kind contributions from academia and industry. MARS is contributing with innovative expertise in commercialization.

The Deltasorb® anesthetic collection technology enables hospitals to comply with EPA toxic release regulations and Occupational Health & Safety Standards. It also enables hospitals to showcase their green community partnership with no capital outlay, no retrofits and no new infrastructure. Plus, hospitals qualify for monetary incentives in the form of Carbon Offset Credits and Raw Material Contribution Payback. The use of this technology secures a new source of supply for generic anesthesia.

Blue-Zone has successfully implemented the Deltasorb® Anesthetic Collection Service in over 200 operating rooms across Ontario, Canada.



**To install the Deltasorb® Anesthetic Collection Service at your hospital or for more information call (905) 761-1224 or visit [bluezone.ca](http://bluezone.ca)**

*Saving our neighborhoods... every day!*



## ANESTHETIC COLLECTION SERVICE

### Blue-Zone Technologies Ltd

#### Executive Team

*Mr. Vaughn Goettler, BA, MBA*

Chief Executive Officer

Extensive and successful experience in operations and sales of service companies, industrial/medical gases, waste management and energy, and heating and air-conditioning fields.

*Ms. Dusanka Filipovic, P. Eng.*

President and Vice Chair of the Board

Co-inventor of the Deltasorb® Technology and Company's Founder that led to the growth of Blue-Zone during its' start-up and early commercialization.

*Mr. Laurence Whitby P. Eng., LLB,*

Vice President of Operations

Broad based management experience in both engineering and law and solid background in the Industrial Gases Industry.

#### Management Advisory Board

- 20 Senior Executives, Medical Practitioners and Industry Insiders and world-renowned Scientists
- Dr. Gerald O'Leary, Chief, Anesthesia, UHN and Mount Sinai Hospital;
- Dr. Steven Brown, former Chair, Ontario Medical Association, Anesthesia Section
- Dr. John Doyle, Staff Anesthesiologist, Cleveland Clinic Foundation, Ohio, USA

#### Blue-Zone Technologies Ltd.

14 - 84 Citation Drive, Concord (Toronto), ON Canada L4K 3C1

Tel: (905) 761-1224 • Fax: (905) 761-3371

email: [health@bluezone.ca](mailto:health@bluezone.ca) • Website: [www.bluezone.ca](http://www.bluezone.ca)

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