# Join our mission to achieve

# **Net-Zero Emissions**



Our planet won't wait.

Neither we will.

# **About Us**

Blue-Zone Technologies Ltd. is the world's first Cleantech Pharma company.

We collect unused anesthetics that would normally be vented into the environment and process the collected material into its pure form providing a sustainable and cost-efficient source of inhalation anesthetic drugs\*.

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We are focused on our vision to make a significant contribution to the health and well-being of the communities surrounding Blue-Zone certified healthcare facilities worldwide.

\*Pending regulatory approval

Together, we can

green the world

**Get in Touch** 

Phone: +1 (905) 761-1224 Email: Health@blue-zone.ca Website: http://www.Blue-Zone.com Address: 84 Citation Drive, Suite 13, Concord, ON L4K 3C1, Canada



Sustainable ANESTHESIA RECOVERY





## IHY BLUE-ZONE Matters

Over 60,000 Operating Rooms in North America<sup>1</sup>



Each Operating room uses on average 20 L of Anesthetic per year<sup>2</sup>

Less than 5% of the anesthetics used are consumed by the patient<sup>3</sup>



The un-used anesthetic is typically removed from the Operating Room and vented into the environment<sup>3</sup>

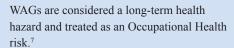
Waste Anesthetic Gases (WAG) have a Global Warming Potential 1000 times more potent than  $CO2^4$ 



WAG has an annual Global Warming Potential of over 600,000 Metric Tons of eCO2<sup>4</sup> in the North American



30 Million Trees would have to be planted annually to offset the North American WAG<sup>5</sup>





WAGs are five times heavier than air, settle near ground level, and may adversely impact human health in neighbourhoods near

healthcare facilities<sup>11</sup>.

Conventional anesthetic manufacturing processes can contribute up to an additional 50% to the carbon footprint<sup>8</sup> of WAG from hospital sources.

Blue-Zone's Patented **Deltasorb**® and **Centralsorb**® technology captures 100% of the WAG before it is vented to the environment<sup>9</sup>

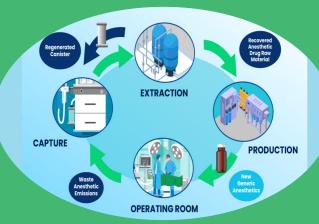
The WAG contained in the Deltasorb® and Centralsorb® canisters are desorbed in our manufacturing facility and the regenerated canisters are returned to the hospital.

The raw material from our desorption process is then used in our patented distillation process.

The outcome is pure, branded generic, inhalation anesthetic produced by isolation.

Sustainable and green manufacturing process<sup>10</sup>.

### **HOW IT WORKS**



Deltane™ Desflurane\* Deltane™ Sevoflurane\* Deltane™ Isoflurane\*

12016, iDataResearch

<sup>2</sup>Blue-Zone internal Research

<sup>3</sup>AIHA.ORG, White Paper, Vestion 1, October 28, 2021

<sup>4</sup>Can J Anesth, https://doi.org/10.1007/s12630-019-01385-w

5https://www.encon.be/en/calculation-co2-offsetting-trees

6https://www.ameriresearch.com/inhalation-anesthesia-market/
7 Turk J Anaesthesiol Reanim. 2021 Apr; 49(2): 93–99.

8https://doi.org/10.1016/j.resconrec.2021.105411

<sup>9</sup>A Greener Anesthesia Through Capturing of Volatile Anesthetics Lauren Della Mora; Claude Laflamme, MD, FRCPC, MHSc; George Davis, RTTech; Elihu Henry, AA/RT Sunnybrook Research Institute, Toronto, Ontario

 $^{10}\mbox{Blue-Zone}$ 's environmental footprint of capturing/processing/transportation of 1 L of an esthetic is approximately 0.024 tonnes of eCO2

<sup>11</sup> W. Habre, T. Asztalos, P. D. Sly, F. Petak, Viscosity and density of common anaesthetic gases: implications for flow measurements, BJA: British Journal of Anaesthesia, Volume 87, Issue 4, 1 October 2001, Pages 602–607, https://doi.org/10.1093/bja/87.4.602

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#### **JOIN US**

#### Help us green the world

#### **GET CERTIFIED**

Contact us at Health@blue-zone.ca

