

in the
CLEARZONE
harnessing the power of nature



EVERY DAY, WE MAKE BUSINESSES SAFER BY EQUIPPING THEM WITH CLEAN AIR.

In The ClearZone has developed sustainable air sanitizing devices for commercial spaces.

We cost less and do more than disinfecting with chemicals while reducing airborne pathogens in real time to make indoor spaces healthier.



WHO ARE WE?



In The ClearZone is a Canadian owned and operated company that creates sustainable technology to help businesses improve the safety of their customers and staff through air and surface sanitizing products.

Our products are scientifically proven to reduce pathogens, including SARS-CoV-2; affordable; and offer long-term benefits that **show** your people how you are actively serving them.

We are committed to providing businesses with effective, innovative and sustainable solutions to help them get back to work.



WHAT WE DO

In The ClearZone uses proprietary to create devices that help businesses reduce viruses & bacteria in commercial settings. Our products are:

- ✓ **Automated**
- ✓ **Chemical-Free**
- ✓ **100% Natural**
- ✓ **Total Sanitization** - *air + with benefits for hard & soft surfaces*
- ✓ **Broad-Spectrum Inactivation**
- ✓ **Proprietary Technology** - *HydroClear Technology*

STATEMENT OF CONFIDENTIALITY: This slide contains information that is proprietary as patents are in review with our legal team. It has been shared with you in confidence and cannot be shared until the patents have been filed. This information will not be a part of any external communications.

HYDROXYLS IN NATURE

Hydroxyls are responsible for eliminating volatile organic compounds (VOCs) in nature, and thus, are often referred to as “**nature’s detergent**”. Hydroxyls decompose inorganic and organic compounds both in the air (gasses and aerosols).

The sun’s light strikes oxygen and water vapour, releasing hydrogen and oxygen from their molecular bond and creating nature’s own air sanitization system. These charged hydrogen and oxygen particles are now free to create new bonds, resulting in the inactivation of airborne pathogens.

Outdoor air is filled with hydroxyls - between 2-10 million parts/cm³.

ClearZone’s HydroClear technology releases 2 million parts/cm³, providing the benefits of outdoor air.



COMMERCIALIZING HYDROXYL TECHNOLOGY

Hydroxyl technology was first harnessed by NASA for use on the International Space Station to eliminate VOCs.

NASA used the natural sanitising actions of hydroxyl radicals, which they has said '**acts like a detergent in the air**'.

Later, this technology became more mainstream and was even used in 2001 during the Anthrax threats in Washington, D.C. Hydroxyl technology was tested by the University of Wisconsin who determined it to be effective in eliminating Anthrax spores.^{2 3 4 5}

In The ClearZone has taken the concepts discovered by NASA and brought them to our customers.

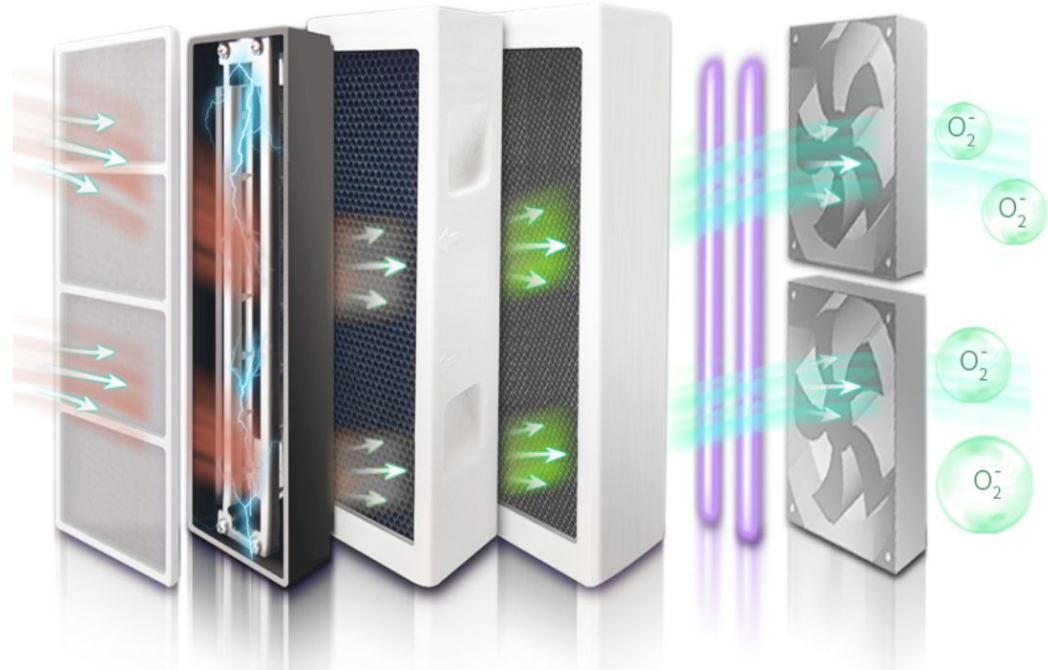


HYDROCLEAR TECHNOLOGY

Built in collaboration with ICFAR Research Institute out of Western University, ClearZone developed our HydroClear Technology for use in occupied spaces.

This technology, uses a series electrostatic and HEPA filters, UV light and natural **hydroxyls** to **actively destroy pathogens** where they are.

NASA uses hydroxyls and says they 'act like a detergent in the air'



OUR TECHNOLOGY

ClearZone HydroClear Technology offers all of the benefits of an air purifier, with advanced electrostatic filters and hydroxyl particles.

- Washable Pre Filter catches large particles, extending the lifetime and efficiency of the product.
- HEPA 13 filters catch up to 0.3 microns
- Washable Electrostatic Filter catches up to 0.1 microns while improving energy efficiency and reducing noise
- HydroClear hydroxyl particles go out and actively inactivate viruses and bacteria, where they are in real time.



Comparing Solutions

“Ventilation is likely to have less of an impact [...] because the greatest risk of exposure is when you’re close to someone” - **Aerosol Research Centre**



Hepa Filters and Ventilation-based solutions require pathogens to enter and travel through their system to be effective. **Many existing systems can not support heavy HEPA filters.**

They do not address viruses and bacteria close to the source

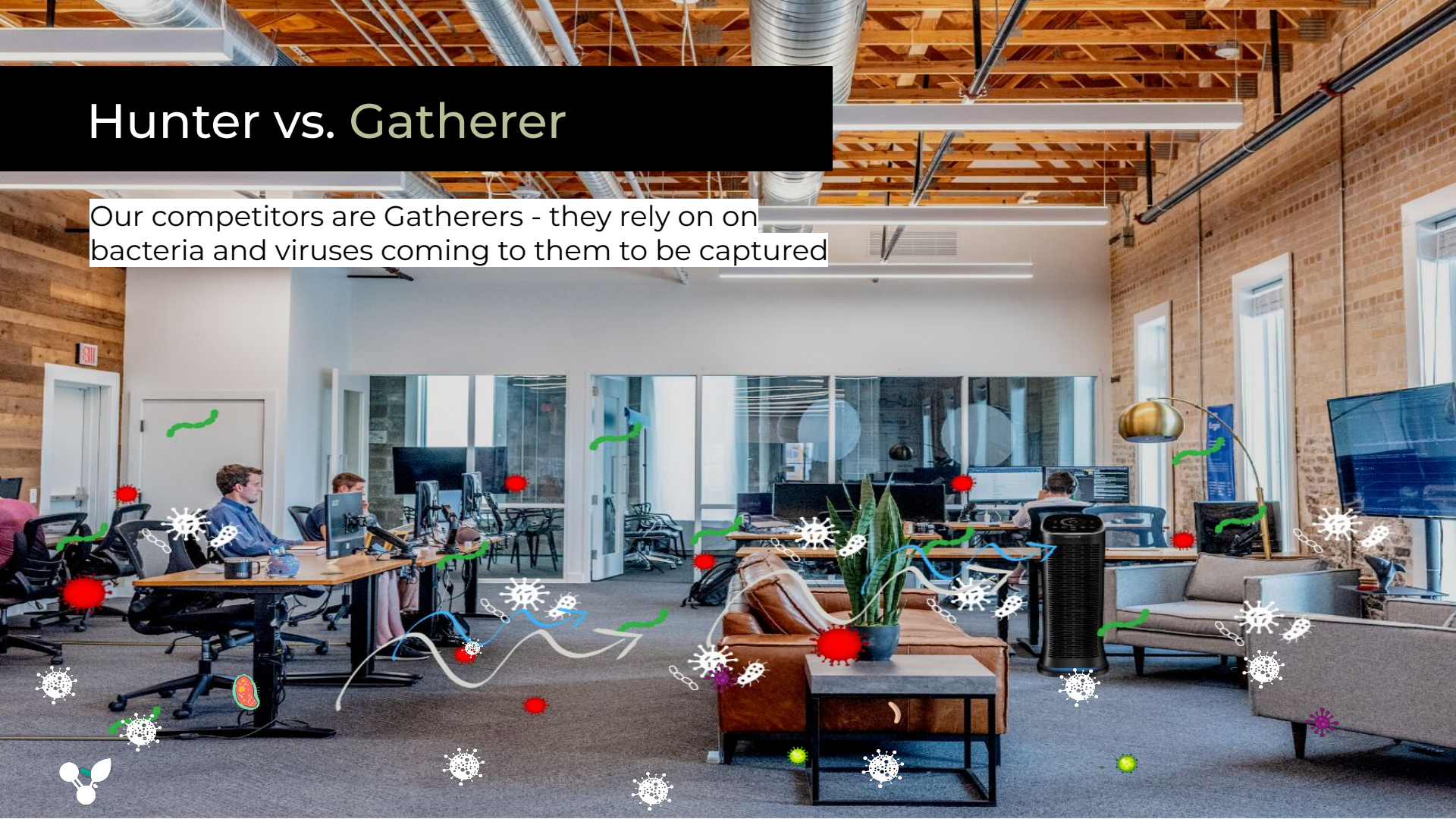
ClearZone’s HydroClear particles fill the space, seeking out and attacking pathogens where they are.

ClearZone’s solution **does not require or put stress on existing ventilation systems** or require maintenance and expensive installation.



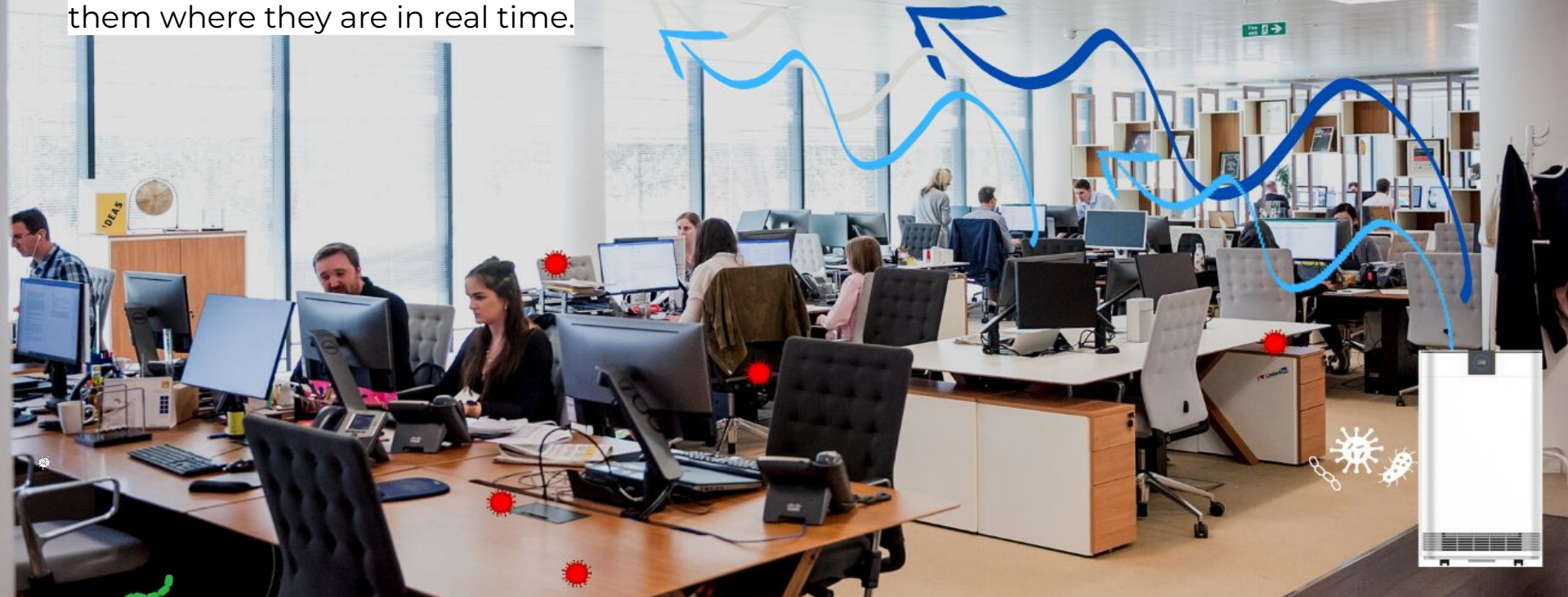
Hunter vs. Gatherer

Our competitors are Gatherers - they rely on on bacteria and viruses coming to them to be captured



Hunter vs. Gatherer

ClearZone's products are both Gatherers & HUNTERS.
Our products catch pathogens but also hunt & inactivate them where they are in real time.



MARKET COMPARISON

ClearZone's HydroClear Technology is often compared to air purifiers, ionizers and competes with UV.

A key differentiator to this technology is HydroClear's ability to actively reduce pathogens in an area, while other methods use passive purification or potentially harmful components.

	ClearZone's HydroClear	Filters (HEPA)	Photocatalytic Oxidation	Ionization	Germicidal UV In-Duct	Hydrogen Peroxide
Safe for Occupied Spaces	Yes	YES	YES	YES	YES	LIMITED
Reduces Pathogens in Air - INSIDE the Devices	YES	YES	YES	YES	YES	NO
Reduces Pathogens in Air - OUTSIDE the Devices	YES	NO	LIMITED	LIMITED	NO	LIMITED
Kills Pathogens on Surfaces	YES	NO	LIMITED	LIMITED	NO	LIMITED
Safe for Materials	YES	YES	YES	YES	YES	NO
VOC & Odor Removal in Air INSIDE the Device	YES	NO	YES	YES	NO	NO
VOC & Odor Removal in Air OUTSIDE the Device	YES	NO	LIMITED	LIMITED	NO	NO
Sensor Driven Controls	YES	NO	NO	NO	NO	NO
Scaleable	YES	YES	NO	LIMITED	NO	NO
Remove Particulates	Yes	YES	NO	YES	NO	NO



APPLICATIONS & MARKETS

ClearZone products are currently being used in education facilities, office & meeting spaces, exam & surgical rooms, clinics, event spaces, hotels, restaurants and many more.

As portable, standalone products, they do not depend on building maintenance or condition to run optimally and can be moved from room to room for optimal coverage.



TECHNICAL RESEACH

Hydroxyls are a safe and well-studied method for sanitization.

- ✓ CSA 22.2 Standards
- ✓ Are recognized and regulated by the EPA ¹⁶
- ✓ Have received FDA approval as medical devices
- ✓ Are recognized and regulated by the OSHA ¹⁷



Environmental Topics

Laws & Regulation

Substance Registry Services (SRS)

Hydroxyl radical

Substance Details

Internal Tracking Number:	17135328
Substance Type:	Chemical Substance
Systematic Name:	Hydroxyl
CAS Number:	3352-57-6
EPA Registry Name:	Hydroxyl radical
Molecular Weight:	17.01
Molecular Formula:	HO

[Additional Metadata](#)

KEY BENEFITS

- ✓ **Decrease pathogens where they are**
- ✓ **Kill bacteria in real time**
- ✓ **Providing clean air as a front line defence**
- ✓ **Decreases allergens**
- ✓ **Allow for safe gathering**
- ✓ **Create outdoor air, indoors**



THE BREEZE



- Washable Pre Filter
- Washable Electrostatic Filter -0.1 microns
- TiO2 Filter - Photocatalytic
- Germicidal UV
- 2m pc/cm3 hydroxyl release
- Available upto 160 sqft.
- Eco Mode
- Automated - one-touch control
- Portable ~2lbs
- HydroClear Technology

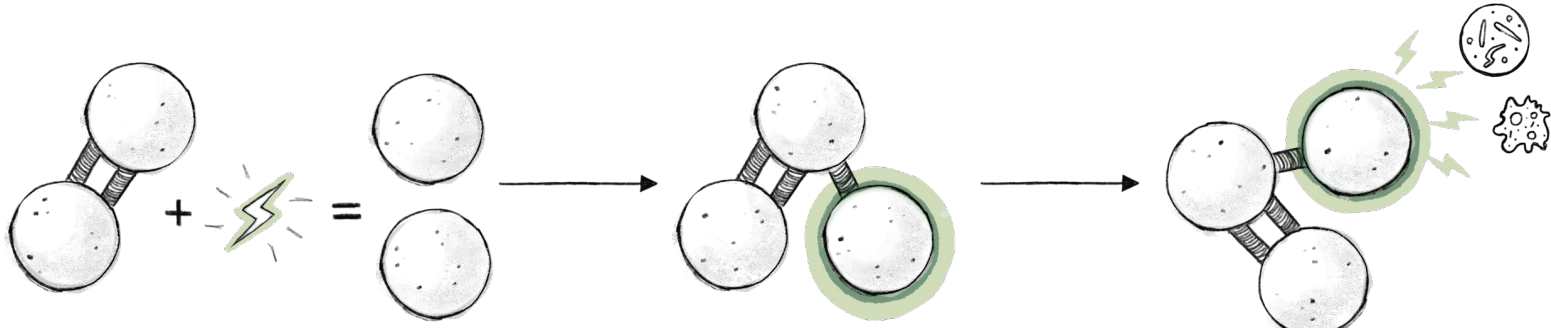


THE REFRESH

- Merv 13 HEPA Filters - 0.3 microns
- Washable Pre Filter
- Washable Electrostatic Filter -0.1 microns
- 2m pc/cm3 hydroxyl release
- Available upto 850 sqft.
- 609 m3/hCADR particulate
- 350 m3/h CADR pollutants
- Air Quality Sensors & LED Display
- Automated
- Portable
- HydroClear Technology



HOW DOES HYDROCLEAR WORK?



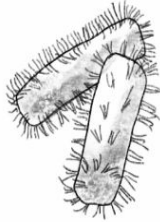
- Oxygen & ambient water (O +HO) particles are actively drawn into ClearZone's machine
- Pathogens are destroyed as they pass through the Plasma Field
- UVC light breaks the chemical bonds creating free ions
- These ions are pulled through metal oxide-coated filters that convert them into SuperOxides, Hydroxyls and Peroxyls (Reactive Oxygen Species)
- ROSs oxidize pathogens, actively neutralizing them
- Outside of the machine, these ROSs oxidize pathogens, allergens, bacteria etc. before they naturally break apart back into oxygen & ambient water



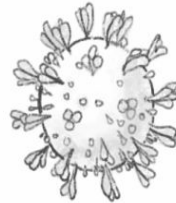
EFFICACY

ROSs have a **long history** of deactivating unwanted germs, viruses and bacteria. These include SARS strains (**SARS-CoV-2** the COVID-19 virus), MRSA, pollen, HSV and have even been used in cases of biological warfare at neutralizing threats like Anthrax.

Studies have found that deactivation of viruses and bacteria using is achieved with consistent exposure.



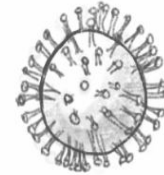
E-Coli



SARS



Various Staph
Infections



H3N2



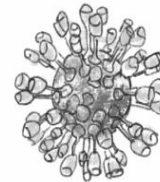
MRSA



Yellow Fever



MSV



HSV



Polio



**Long-term,
sustainable,
solutions with
long-term benefits. 🌱**

