

# Toucan Eco

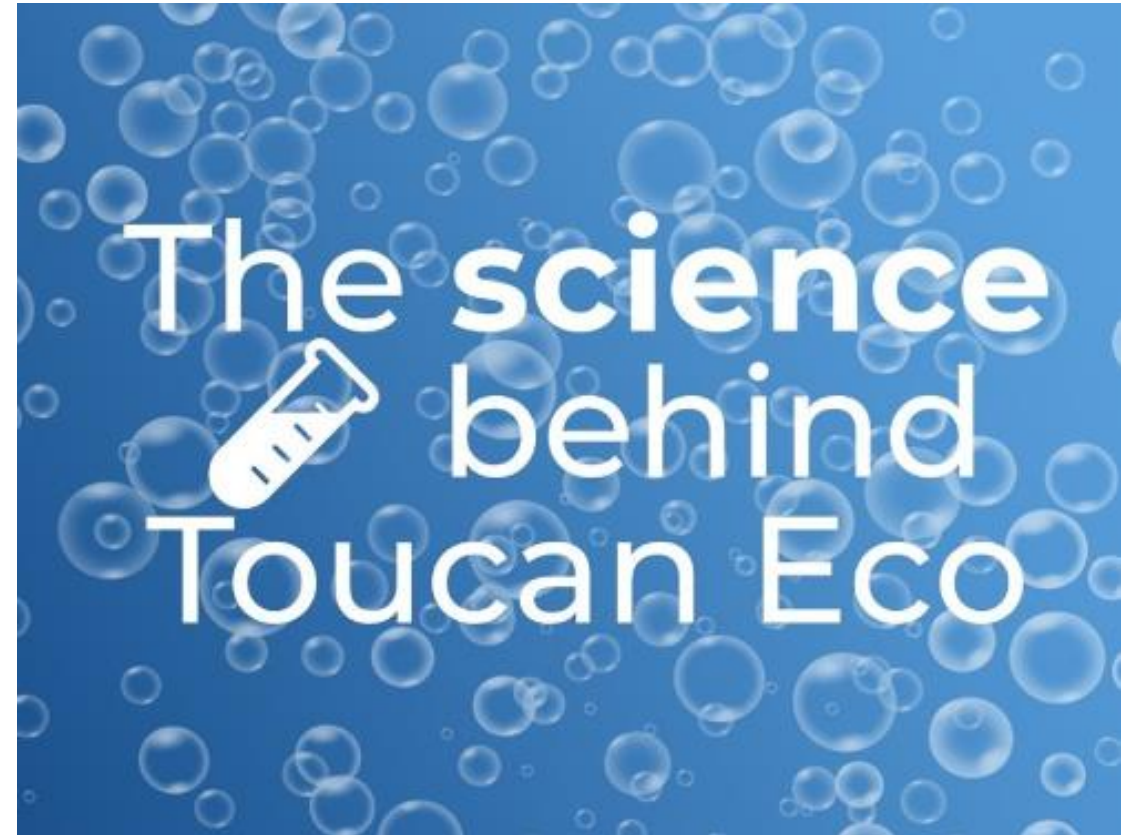
The future of sustainable cleaning

# Sustainable cleaning with Toucan Eco

- Generates cleaning & disinfection solution on-site using water, salt & electrolysis. This removes the need for chemicals, plastic containers, packaging, transportation, handling, storage & disposal.
- The solution is powerful, safe & eco-friendly, killing up to 99.999% of all bacteria, viruses, fungi, spores & moulds.
- Once made just spray, wipe or mop to clean & disinfect any surface.
- Apply as a mist to disinfect & deodorise larger areas.
- It doesn't replace strong degreasers & descalers.
- Simply make the solution whenever it's needed.

# How it works

- + anode: hydrogen & oxygen in the water reacts with the chlorine in the salt to make hypochlorous acid (HOCl).
- - cathode: sodium & chlorine in the salt combines with the oxygen in the water to make sodium hydroxide (NaOH).
- Produces a safe & effective disinfectant cleaner, from just water & salt at a gentle pH.



# What is this, do you understand it, would you want it on your premises?

- ✓ Quaternary ammonium compounds
- ✓ Benzyl-C12-18-alkyldimethyl
- ✓ Chlorides
- ✓ C12-14-alkyl (ethyl phenyl) methyl dimethyl
- ✓ Perfumes
- ✓ Non-ionic-surfactants
- ✓ Limonene



# The ingredients for Mr. Muscle Multi-surface

- ✓ Lots of energy to make.
- ✓ Millions of plastic containers.
- ✓ Thousands of miles to deliver.
- ✓ When empty thrown away, are they recycled?
- ✓ Harsh, synthetic man-made chemicals – COSHH implications
- ✓ Purchase, storage, use, repeat...
- ✓ Kill rate 99.99% - Toucan 99.999%.



# Science inspired by our own immune system

- Inspired by one of the most powerful microorganism repellent systems around: the human body.
- When we come under attack from invading germs, our immune system sends white blood cells called neutrophils straight to the infection.
- Once activated, these cells produce the same hypochlorous acid.
- The effect is now available on demand & on-site.



# Sustainable benefits of Toucan Eco

- Reduces plastic waste so no disposable containers & packaging.
- Reduces use of hazardous synthetic chemicals, waste & disposal.
- Reduces energy in manufacturing of synthetic chemicals, plastics, transport, disposal, etc.
- Uses natural & naturally sustainable inputs of water & salt.
- Zero environmental hazards, reverts to slightly salty water if not used.
- Non-toxic, non-hazardous & hypoallergenic, with no COSHH implications.
- Reduces your carbon footprint.
- Good for staff, colleagues, shareholders & the planet.



**The greener  
solution**

# Other benefits

- No synthetic & hazardous chemical inventory kept on-site.
- No disposal of synthetic chemicals, packaging & plastic containers.
- No stock-checking of synthetic chemicals required.
- No tendering process for synthetic chemical supply.
- No cost increases for synthetic chemicals, due to energy price, materials, transport, etc.
- ROI comparing current synthetic chemical spend Vs capital expenditure of Toucan Eco.



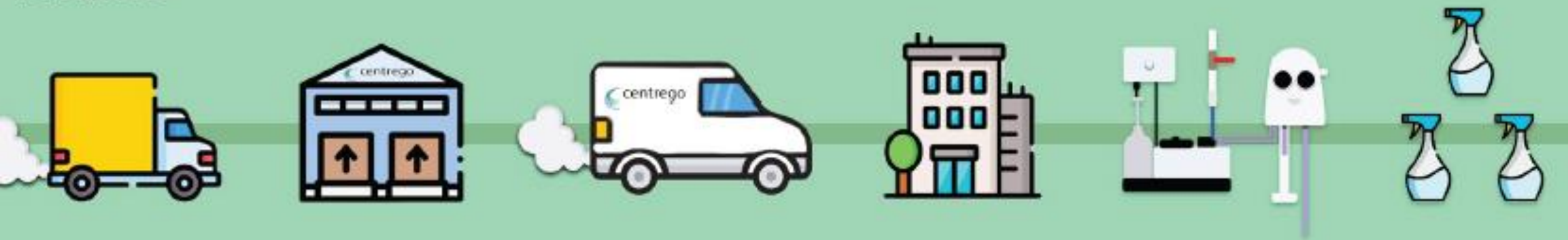
# Environmental report

- Carbon Footprint Screening Report by Force Technology quantifies the environmental impact of adopting Toucan Eco.
- CO<sub>2</sub> emissions calculated as best indicator of overall environmental impact due to their contribution to greenhouse gasses & global warming. Calculated in 3 parts:
  - CO<sub>2</sub> emissions generated from the raw materials & manufacture, transport, packaging, & delivery to site
  - CO<sub>2</sub> emissions generated from the production on-site of 1l of 'point-of-use' ECA solution
  - The Lifetime Assessment (LTA) of CO<sub>2</sub> emissions for a device, based on expected device lifetime & production volumes
- For Toucan Active Plus, the emissions to build & transport the system to site is 293kgs of CO<sub>2</sub>. The emissions to produce 1L of solution is 3.07g of CO<sub>2</sub>, & the LTA (the aggregated emissions from the build & on-site install plus solution generated over the expected lifespan) is 3.5g of CO<sub>2</sub>
- These figures should be compared with the sourcing of raw materials, the production of synthetic chemicals & plastic containers, packaging & disposal, distribution & transport to site of synthetic chemicals, that's repeated every delivery.
- The Carbon Footprint Screening Report does not account for the H&S advantages of using ECA solutions
- The summary & full report are available on request.

# Synthetic chemicals



# Toucan Eco



# Buildings & wellbeing

- Supports green building agenda.
- Improves hygiene standards for staff & facility visitors.
- Avoids chemical use.
- Reduces airborne pollutants.
- Improves air quality.
- Aligns with BREEAM's & WELL's focus on sustainability.



# War on plastic

- A typical one-litre plastic bottle uses about two litres of water to make.
- Each bottles takes about 4 million joules of energy to create.
- Every ton of plastic produced creates three tons of CO2(source).
- 90.5% of global plastic waste has never been recycled (RSS).
- Only 30% of all plastic is recycled in the UK (BPF).
- 469 millions cleaning bottles thrown away each year in the UK.





# Apple

Toucan Eco is used in every Apple store worldwide, that's 550 sites. To replace synthetic cleaning and disinfection solutions for back and front of house. Also used to clean and disinfect Apple products in-store, replacing IPA wipes.



# Cunard & P&O cruise ships

All Cunard & P&O cruise ships (10) have Toucan Eco Flow systems on-board to replace all synthetic cleaning and disinfection chemicals. Used in all areas, with other cruise lines planned for 2023.



# The Restaurant Group

Uses Toucan Eco across 210 pubs & leisure facilities each year:

- Saving 2.7 tonnes of plastic packaging.
- Reducing 35,000 tones of chemicals.
- Removing 12,200 cases from distribution & handling.
- Replacing 11 different chemicals
- Six-month ROI.

“It has a ROI of within six months, after which we’re saving all our chemical spend. It’s effectively free to make from that point onwards.”





# Compass Group / MOD

Compass Group uses chemical free cleaning across its Defence & Government Services estate

- The cleans over 21mil square metres a week.
- Chemical free cleaning across 90 locations.
- Removed 1.5m litres of chemical cleaning products.
- And prevented 50 tonnes of packaging waste each year.

“The systems are highly effective for our clients & customers, safer for our people to use & support us in reducing the environmental impact of our services in our drive towards net zero.”



# Royal Mail

Royal Mail have 140 Toucan Eco systems in place throughout the UK&I. They are used to clean & disinfect 60 mail sorting sites, including their 13 Regional Distribution Centres.

- Supports their environmental & sustainable responsibilities.
- Reduce their use of synthetic chemicals.
- Reduces plastic waste.
- Enhances the safety of their staff, customers, colleagues.
- Saves money.



# Summary of Toucan Eco

- Replaces the majority of synthetic cleaning chemicals.
- Significantly cuts plastic waste & chemical use.
- Helps to reduce your carbon footprint.
- Supports the sustainable target of being net zero by 2040.
- And saves money, quick ROI & virtually-free solution thereafter.



# Toucan Eco

The future of sustainable cleaning