

Protect Public Health / Hygiene vs Protect Ecology

HOW TO RECONCILE TWO IMPORTANT GOALS WHICH ARE NOT EASILY COMPATIBLE?

The need to protect the public health / hygiene (which implies tons of toxic ingredients)

The necessity to protect the environment

Trying to control infectious deceases is a clear priority. To that effect exists a whole range of processes, going from cleaning to sanitization, disinfection and even sterilization

But this also implies that every day our society rejects tons of toxic chemical cleaning and disinfectant stuff

How to minimize the impact of it on the nature, the water, the underground or the air?

A balancing act is needed, but only few efforts have been made so far





Select Market Trends & Drivers

Demographics



25% more people by 2050, with most growth in emerging markets and aging population in developed markets

Driving the demand for water treatment solutions and public hygiene (preventive health)

Climate Change



Higher temperatures, extreme weather events, land & water scarcity and decreasing biodiversity

Driving the demand for environmentally friendly solutions

Public Health



Unprecedented levels of disruption across the world caused by the Covid-19 pandemic

Driving the demand for anti-microbial and safe solutions

Technology Shift



Increasing consumer awareness about hygiene and preventive healthcare

Driving the demand for innovative surface disinfectants



The Investment Opportunity in a Nutshell

company

Swiss NeWater is a technology company based in Switzerland

technology & products

disruptive and scalable technology: 1 machine producing 18 disinfection formulas based on water, salt, and electricity,

7 patents



business model

innovative business model, initial proof of concept in India, then global scale up

manufacturing

JVC with Forbes Marshall in India
factory in Pune
own production of electrode

environment

biodegradable sustainable & environmentally friendly

fund raising

accompaning commercial growth, international expansion, technology and IP strong team



Swiss NeWater Holding – Purpose, Vision & Mission



Swiss NeWater is committed to support the worldwide population for a better tomorrow, contributing to safer and better lives. Many communities around the world suffer from lack of hygiene and infections. **Pandemics** are affecting everybody. The same happens with **climate change**. Swiss NeWater purpose is to bring **effective and affordable solutions**



Become a global leader in **providing economic green solutions** for good hygiene and **infection prevention**, while at the same time **respecting nature**



Mission

Develop **disruptive** disinfection & cleaning technology based on a green process, which is **effective**, **safe**, **ecological and cost-competitive**Offer a **single machine** for the **onsite production** of a wide **range** of disinfection & cleaning products



Swiss NeWater - Key Product Attributes



- Electrolysed water machine
- Patented disruptive technology: replaces toxic cleaning and disinfecting chemicals
- . Cleans + disinfects + biodegradable
- Highly effective: kills 99.99% viruses (including Covid 19), bacteria, algae,
 fungi
- Eco-friendly: biodegradable, environment protection, no logistics
- . Inputs: water, salt, electricity
- . Affordable: lower cost than chemical products
- . Customer ROI: 12-18 months

Swiss NeWater - Healthiest Way to Clean, Safest Way to Handle



Cleaning & Disinfection Effectiveness







Lower Cost



Ease of Use



Reducing **Complexity**



Safe



Market Expected Growth

■ The global surface disinfectant and hygiene B to B market size is valued at USD 55 billion in 2022, and is expected to grow at a compound annual growth rate (CAGR) of 6% from 2020 to 2030

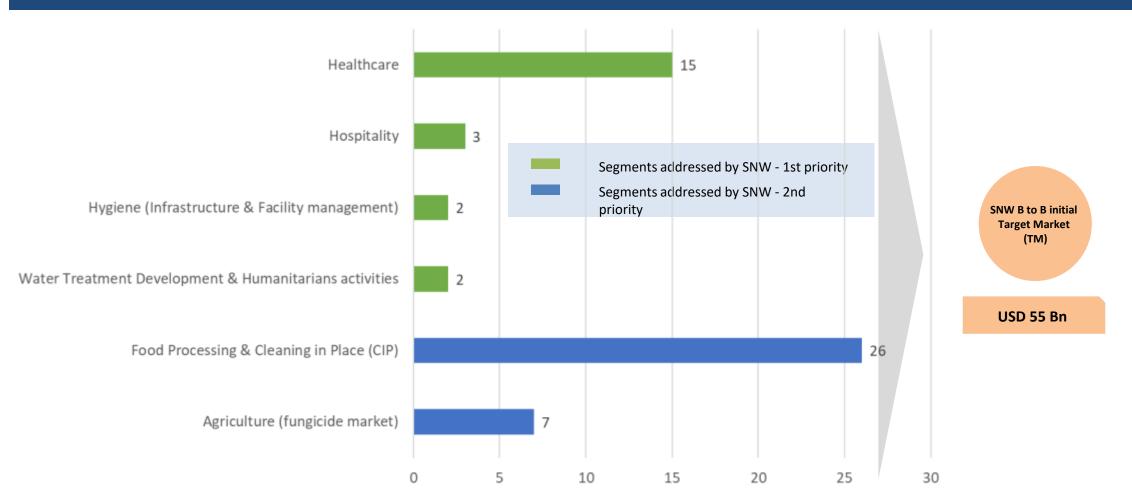


- The growth in the market can be attributed to the increasing prevalence of Hospital-Acquired Infections (HAIs), along with the presence of favourable regulations concerning the usage of surface disinfectants in diagnostic laboratories, hospitals, research laboratories, and pharmaceutical & biotechnology labs, among others
- Growing cases of chronic diseases are also projected to help boost market growth over the forecast period. Increasing consumer awareness about hygiene and preventive healthcare is also driving the demand for surface disinfectants
- The unprecedented levels of disruption across the world caused by the Covid-19 pandemic had led to increase product demand



Total B to B Market Size - Breakdown by Segments

Market Breakdown per Sectors in USD Billion – Year 2022



Source: Linker, EHL, Bloomberg, Xerfi & Management Estimates



Relevant Market & Competition (1/2)







- We are in the B to B market of surface cleaning and disinfecting products, which is dominated by two players Diversey and Ecolab
- But we do not consider Diversey or Ecolab as direct competitors, i.e. chemical manufacturers and cleaning solutions providers in this market
- Diversey (2.8bn \$ revenue) is to be considered as B to B global provider of hygiene, infection prevention, and cleaning solutions for the Institutional and Food & Beverage markets
- Ecolab (14.2bn \$ revenue) is to be considered as B to B provider of water treatment and process applications, and cleaning and sanitizing solutions
- The Swiss NeWater concept is completely new and has to be considered as a machine based disruptive technology competing with traditional chemical players



Relevant Market & Competition (2/2)

- Our goal is to become the worldwide leader in the production on the spot of B to B new ecological products from electrolyzed water, less expensive and at least as efficient
- Several B to B young electrolyzed water ventures have been launched, such as:
 - Envirolyte
 - NaOClean
 - Kangen
 - Klarion
 - Cleanea
 - Orbio
 - Prominent
 - EwCo,

- Sterigen
- Grundfos-Selcoperm
- Newtec Water System
- PathoSans, etc.
- Hydroliq Pure Water
- EcoClean
- Aquama
- None of them have reached an international breakthrough
- In B to C, market leaders are mostly selling their solution in bottles, like P&G, Unilever, Colgate-Palmolive, Henkel, Reckitt Benckiser (RB), etc.
- There is also basic cost producers with Javel products like The Clorox Company (\$ 7.1bn net sales)

HydroClean™ – Select Competitors' Machines

Cleanea





















Swiss NeWater R&D and Proof of Concept



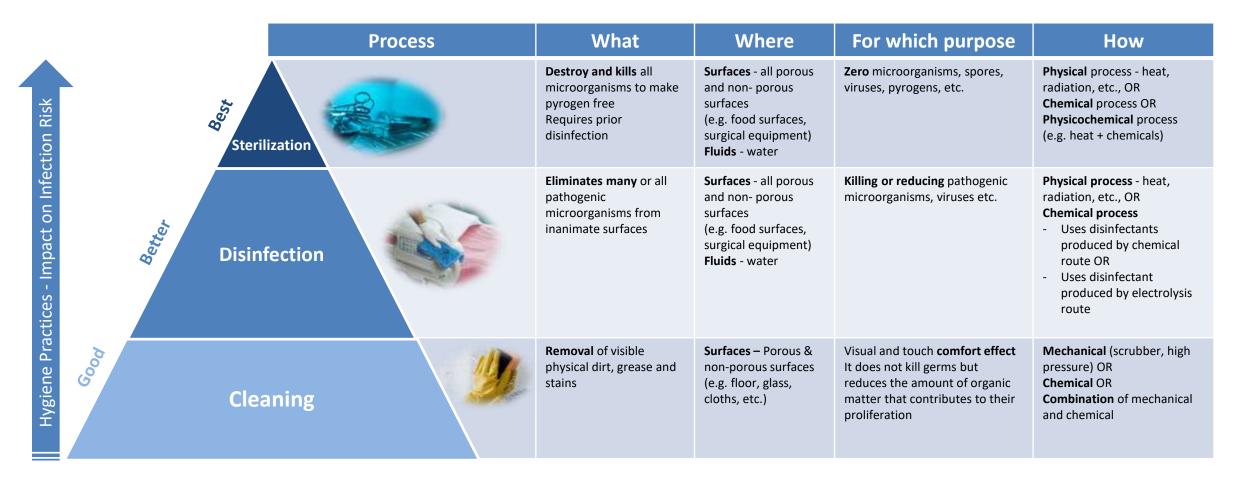




- HydroCleaner machine developed by Swiss / German and Dutch engineers
- 7 patents applications in Switzerland
- Proof of concept in India in line with the Clean India concept and market needs
- JVC with Forbes Marshall

Hygiene Practices – Reducing the Spread of Diseases

Cleaning, Disinfection and Sterilization - Definitions



Sources: various



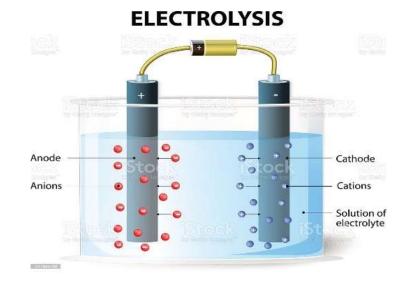
Swiss NeWater Electrochemistry

Principles of electrolysis

Electrolysis is a process, in which electric current is passed through a liquid or solution containing ions (electrolyte) to effect a chemical change. The chemical change is one in which the substance loses or gains an electron (oxidation or reduction)

The process is carried out in an electrolytic cell, an apparatus consisting of **positive** (anode) and negative (cathode) electrodes held apart and dipped into a solution containing positively and negatively charged ions. Electrolysis process is conducted in batch or continuous mode

The substance to be transformed may form the electrode, may constitute the solution, or may be dissolved in the solution. Electric current (i.e., electrons) enters through the negatively charged electrode (cathode); components of the solution travel to this electrode, combine with the electrons, and are transformed (reduced). The products can be neutral elements or new molecules



Swiss NeWater Technology

Uniqueness

LOWER COST

BETTER

Superior electrodes

- Direct production of oxidants
- Electronic control of the process
- Superior disinfectant

HOCI, CIO, H₂O₂, O₃, NaCIO
GREENER

Chemicallyneutral solution

High efficiency

Salted

Anode

'aqueous solution

Cathode

- Low variable costs
- Good energy efficiency
- No logistics
- No storage costs

- Biodegradable & less toxic
- No corrosion of the electrodes
- No phosphate, alcohol-free, phenol free,

Various end products (oxidants) for various applications

- Swiss NeWater technology uses state of art electrode
- The oxidants contained in the Hydra constitute powerful biocides
- To date no virus, bacteria or fungi has been able to develop any adaptive resistance
- The Swiss NeWater electrolysis process produces ONE CONCENTRATED SOLUTION (the Hydra) that goes in an tank
- The dispenser dilutes the Hydra, and adds aroma and a degreaser, according to the chosen application (floor, kitchen table, window glass, etc.)
- Remote-control connection (IOT)



HydroCleaner™ - Two Models of Machines

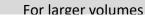
Pro-Flask Machine

Ready to be Commercialized

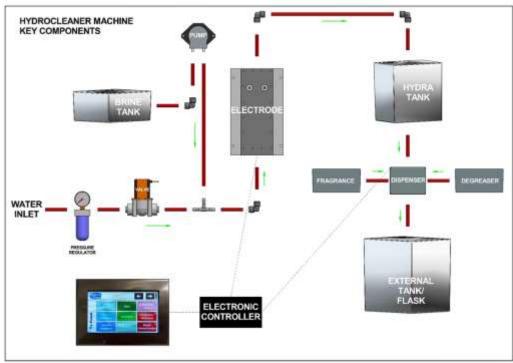
Pro-Tank Machines

For filling individuals flasks with ready-to-use solutions













The Market Opportunity











Food Processing



Water Treatment











B to B

B to G

- > Facility Management
- ➤ Hotels
- ➤ Hospitals

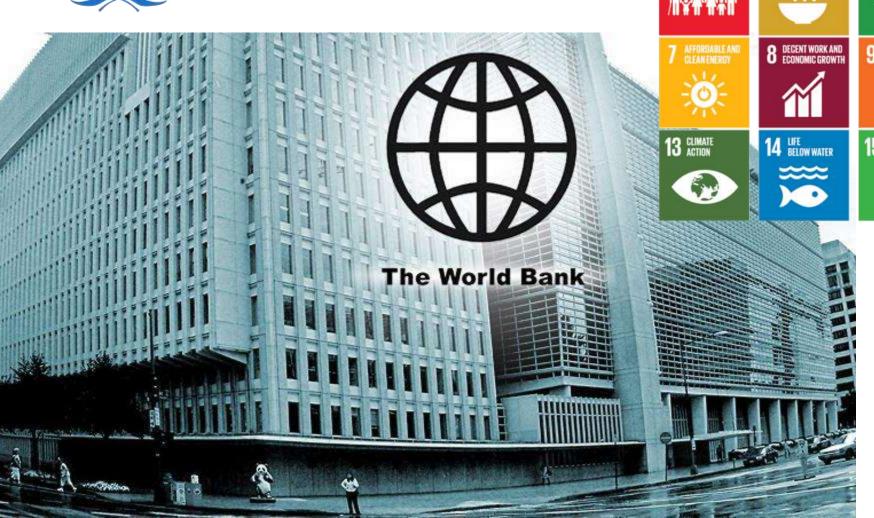
- Health
- Schools
- Airports/Trains
- > Tourism



An ambitions program aligned on SDGs



Better Life Quality





















We are conducting to that effect different bottom up impact studies

Try identify countries of specific needs and how a technology can contribute to satisfy them

Future scale up at level United Nations / World Bank

Swiss NeWater 1st Priority Segments – B to B & B to G

One Machine – Four Market Segments



B to B Hygiene - Commercial



BtoG Hygiene – Governments/NGOs





Sales Channels

- > The B to B channel has four verticals:
 - Facility management, malls, airports, offices
 - Hotels, recreation centres, cruises
 - Hospitals, health care, dentistry
 - Food processing

Nb: It can include direct sales, distributors and key accounts

- ➤ The B to G channel is initially targeting:
 - Ex: Clean India and Preventive Health (slums, Panchayats...)
 - Hospitals
 - Schools, Tourism, Hospitality
 - Railways, Airports, Airlines
- ➤ The B to C foresees selling our solutions in pouches or bottles directly to the end users, For those unable to buy a full machine. Distributors will initially sell to small retail shops or particulars. Large supermarkets would only follow later on
- The C.I.P. channel will be dedicated to industrial sites only.













Business model

- ➤ Our Business model is composed of three elements:
 - Sale of the machine
 - Sale of consumables (pure salt and additives)
 - Service agreement as from second year: IOT check, regular maintenance, light repairs, technological upgrade (mechanical & software)
- ➤ Upfront sale is the standard model, with a gradual payment in two or three steps:
 - 1) on order
 - 2) on delivery
 - 3) possibly with short-term credit
- Leasing / rental is also an option

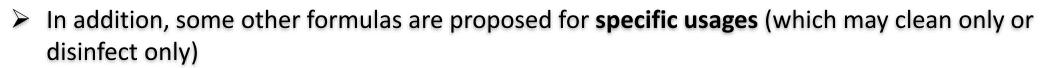
Selling machines is our main business model, but an interesting option is also to offer leasing to customers, or full monthly package (everything included)





USP / Product range

- > USP:
 - Solutions produced on-the-spot
 - which both Clean & Disinfect (eliminate most pathogens)
 - and are Biodegradable
 - only for the cost of cleaning
- Each vertical has a **common trunk of five products** which
 - cleans + disinfects + are biodegradable



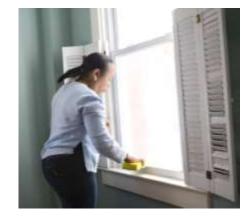
Furthermore, the **costing** of it must be equal or inferior to major competitors (like Diversey, Ecolab and / or Reckitt Benckiser)





Formulas (1/2)

- > The aim is to offer five core products which clean & disinfect and are biodegradable:
 - Floor cleaner & disinfectant
 - Washroom cleaner & disinfectant
 - Glass cleaner & disinfectant
 - Kitchen cleaner & disinfectant
 - Hand wash cleaner & disinfectant
- Those five flagship products are more oriented towards **cleaning** (except hand sanitizer, which is more disinfection oriented), without becoming a me-too of competitor standard formulas.
- > They are based on **electrolyzed water** process
- > They are good at **stains removal**, also without salt traces
- > Appearance toward traditional products: viscous, with a nice fragrance and foam.







Formulas (2/2)

- In addition, they offer a **better disinfection** power than its competitors
- Formulas will also be **biodegradable**, less toxic, with less CO₂ emission, more environment-friendly
- ➤ In addition to these five flagship products, specific products will be available for each of the verticals, see next page.
- > Those specialty formulas will be **customized** / adapted to the needs of the clients
- ➤ Ideally they will also be produced using an electrolyzed water technology, but **not necessarily**, some products will be only cleaners (coloured cloths washing, carpets, heavy oil cleaning), others only disinfection specialties (some hospital applications)





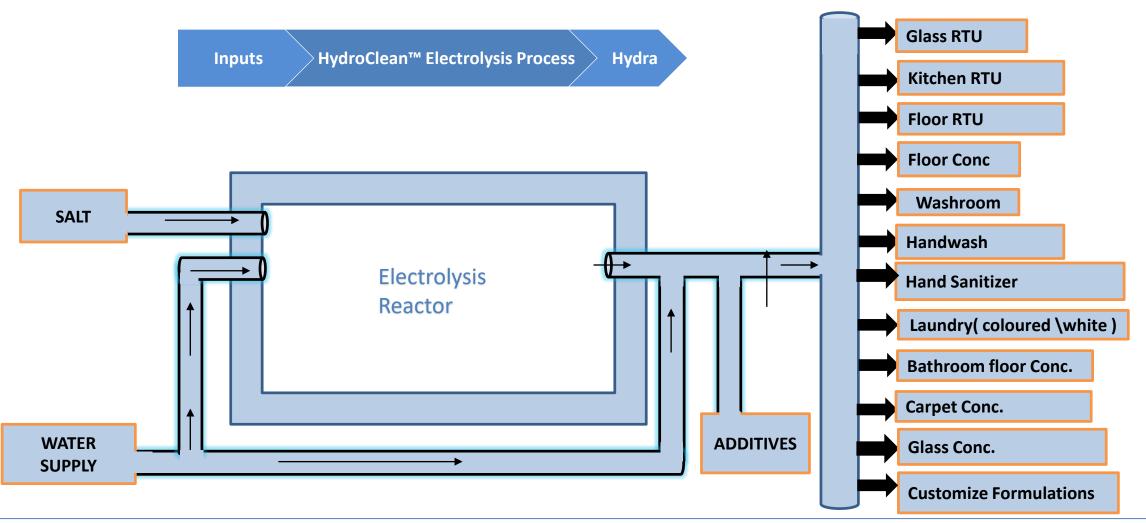
Additional Formulation per Segment

Hospital	Hotels	Facility Management	Food Processing	
Floor	Kitchen / Utensils	Carpet	Cleaning In Place (CIP)	
White Laundry	Glass Cleaner	Floor	Heavy Oil removal	
Washroom	Carpet	Washroom	Fruit washing	
Hand Sanitizer	White / Coloured laundry	Glass Cleaner	Fish, poultry, meat	
Fogging	Heavy Oil	White / Coloured laundry	Customised formulation	
Equipment/ disinfection	Floor	Marble / granite		
Skin Preparation	Washroom	Customised formulation		
Customised formulation	Customized formulation			



Swiss NeWater - End Products

One Single Concentrated Output – Various End Products for Specific Applications





Note: RTU = Ready to Use

Conc. = Concentrated solution

Certificates & Test Reports

- ISO 9001, ISO140001, ISO45001(IMS)
- EC Certificate of Conformity
- Green product certification by CII



- ISO 9001, ISO140001, ISO45001 (IMS)
- EC Certificate of Conformity
- Green product certification for HydroCleaner[™] by Indian CII
- Corrosion test report for ss 304 and ss 316 by NABL laboratory
- Acute oral, eye, skin irritation toxicity reports by GLP laboratory
- Corona virus test (99.99% within 5 min): by NABL laboratory
- Polio, Noro, Adino, Vaccinia virus test reports (99.99% within 1 min) by NABL lab
- FDA test report (against bacteria and fungi)
- Study on clinical pathogens: by Haffkine Institute, Mumbai, effective against antibiotic resistant bacteria
- Biodegradability study: by MOEF lab
- Algae study report (as per OECD guideline)

Swiss NeWater is proud to certify that the HydroCleaner™ machine is a **green concept** because of:

- > natural process, replacing toxic chemical ones / no acid no phenol
- biodegradable (only electrolyzed water + green additives)
- less CO2 emissions / carbon footprint (on the spot production)
- > drastic reduction of plastic bottles



HydroClean™ – Compliance with Applicable Regulation

Regulation

COUNTRY	USA		Europe		India	
	Regulation	SNW Status	Regulation	SNW Status	Regulation	SNW Status
Product classification	Liquid chemical germicides (disinfectants)	Disinfectant	Biocidal products	Bactericidal and fungicidal Product (Biocidal)	Disinfectants	Disinfectant
Regulating body	EPA (Environmental Protection Agency) for disinfectants used on environmental surfaces (housekeeping and clinical contact surfaces) FDA (Food & Drugs Administration) for liquid chemical sterilants/high level disinfectants used in critical and semicritical patient-care devices	Molecule is already registered and approved by EPA Not regulated by USFDA when generated on the spot.	ECHA (European Chemical Agency)	Molecule is already registered and approved by ECHA	CDSCO (Central Drugs Standards Control Organisation)	Not applicable for machine and on the spot generated solution
Applicable laws	FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act)	Molecule is regulated under USEPA. SNW molecule is of lower concentration with the same effectiveness	BPR (Biocide products regulation)	Molecule is already regulated under BPR. SNW molecule is of lower concentration with the same effectiveness	Drugs & Cosmetics Act Legal Metrology Act	Not applicable for on the spot generation
Labelling requirement	40 CFR 156	Not applicable Output of the machine is not intended for commercial purposes	Directive 528/2012 Directive 2000/54/EC Directive 1272/2008 Directive 1999/45/EC	Not applicable Output of the machine is not intented for commercial purposes	Schedule O of D & C Act Rule 96 of D & C Act Legal Metrology Act	Not applicable Output of the machine is not intented for commercial purposes
Commercialisation readiness		✓		✓		√



HydroClean™ – Select Future Possible Applications

Food Processing	Agro Business	Water & Sanitation	Industrial Applications / CIP	Residential	Avanced Medical Solutions
 Meat & poultry processing facilities Fish & shrimps processing facilities Fruit & vegetables Dairy products Breweries Drinks & beverages 	 Seed treatment Pesticide alternatives Green houses Storage : farm-to-market 	 Public water treatment for drinking purposes Public water treatment to destroy hydrogen sulfite Waste-water treatment Public sewage treatment 	 Bleaching - removal fouling from the equipment without disassembling it, bleaching of textiles, paper shellac, carpets, alginates Cooling water treatment and algae control Treatment of hydro carburants 	 Home hygiene B to C Central installations in buildings Car washing 	 Wound treatment Resistant bacteria Hospital operation theatres

