

Greener thinking design and manufacturing

Helping you meet your green goals

Better thinking, better water, better for you, better for the planet[™]

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The damage being done to our planet by singleuse plastic pollution and unnecessary high carbon emissions is one of the most pressing issues of our time. We believe we have a responsibility to do whatever we can to change and improve this situation.

Being a responsible business is not just about expressing our ambitions, it's about what we do to fulfil them. At Waterlogic, we are continually working to reduce the negative impact we have on the natural world, as well as providing the tools for our customers to do the same.

For almost 30 years now we have looked to achieve the very best way of hydrating people without causing harm to human health or damage to the environment. Waterlogic was one of the first companies to introduce mains-fed dispensers to customers worldwide, and we have been at the forefront of the market promoting product design, water quality and sustainability ever since. We have gone out of our way to remove the reliance on single use plastic, reduce water and energy consumption, eliminate emissions from unnecessary plastics manufacturing and transportation, and limit waste.

We continue to pioneer new ways of ensuring that we uphold our promise of safe, sustainable water for everyone. As a leading verticallyintegrated player in the industry, we apply unique technology in the design and build of our water dispensers from our own R&D and manufacturing plants in China, the U.S. and Australia.

This guide will show you the ways we do this and how you can leverage our expertise, dedication and innovation to help you meet your own green goals.







The content from this guide has been extracted from the Waterlogic ESG 2020 Report

Design and manufacturing at-a-glance









20 years

in over 65 countries



3 facilities in China, Australia and the U.S.

322 trademarks







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379 employees across 3 sites

150.000

100%

dispensers

produced each year

wholly owned R&D

and manufacturing

93 patents and 28 design right

A pioneering history in the making

Manufacturing began in 2001 with the purchase of Waterlogic's first plant in South Korea. We moved to China in 2004, giving us complete control over the supply chain from design, production and distribution to servicing.

In 2018, we welcomed Billi manufacturing in Melbourne to the Waterlogic family and a year later we opened Waterlogic's first U.S. R&D and manufacturing facility. The Dallas facility supports customers and dealers in the U.S. and Canada, delivering the same unmatched product quality with a focus on locally-tailored R&D, technical service and product refurbishment.

Sustainably focused product range



Next generation mainsfed freestanding and countertop dispensers



Premium high-volume table water solution for hospitality sector



Integrated dispensers for corporate and hospitality environments

Hot and cold on-thego water bottle filling stations for public areas

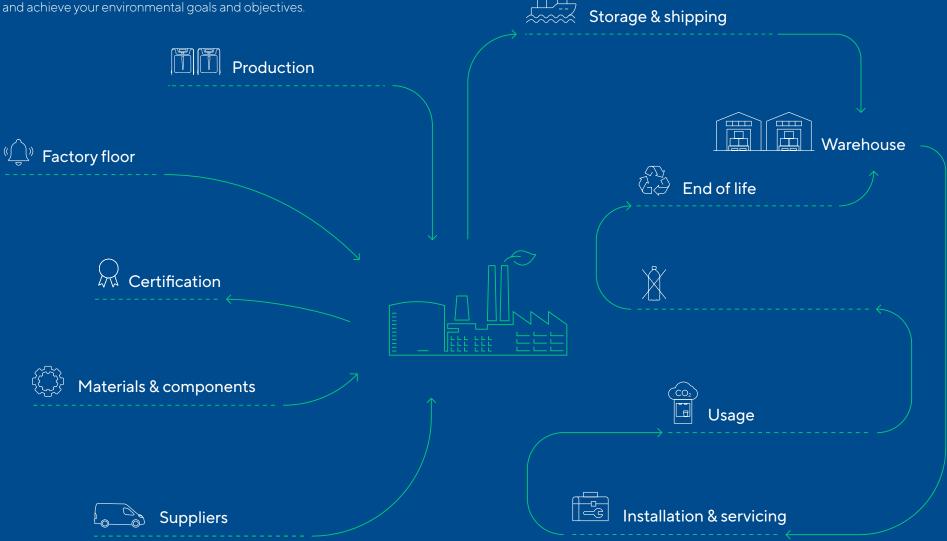


Easy-to-buy practical drinking and dispenser

Our mission is to provide access globally to the best drinking water solutions, to all organisations, in a safe and environmentally-sustainable way

More about our greener thinking

Click the arrows to find out more about the ways we can help support and achieve your environmental goals and objectives.



Eradicate single-use plastic bottles from the workplace

In 2019, Waterlogic commissioned a survey of 500 UK workers across different businesses. Employees reported that they consumed 2.62 more single-use plastic bottles on an average work day prior to having access to a mains-connected water dispenser. Freestanding and countertop dispensers are a great way for businesses to conveniently offer their workers filtered, purified water whilst reducing the number of single-use plastic water bottles in the workplace.

At Waterlogic, we are committed to helping you eradicate plastic. The production and disposal of single-use plastic bottles continues to have a detrimental impact on our planet. Globally, one million plastic bottles are bought every minute with just 9% recycled. By 2050, it is estimated that our oceans will contain more plastic waste than fish, with 12 billion metric tons of plastic in landfills taking more than 400 years to degrade.

What's more, the life-cycle greenhouse gas emissions from plastic gives rise to nearly 1.8 billion metric tons of CO_2 a year; from petroleum extraction, manufacturing and transportation to incinerating and recycling. In fact, bottled water is 900 times more carbon intensive than drinking mains-fed water. Every year Waterlogic helps save billions of plastic bottles from landfill

1,400,000 Waterlogic dispensers



2.62 bottles saved per person every day

25 users per dispenser on average



That's a massive 23.8 billion bottles saved every year

<image>

Enjoy up to 72% carbon footprint reduction

Waterlogic mains-fed dispensers are designed to provide a clear environmental benefit. The cost of transporting, storing and disposing of plastic water bottles is eliminated. Energy, fuel and water are all conserved. The net result is up to a 72% carbon footprint reduction compared with a bottled water cooler.

Source: Environmental Consultancy Sustain Report; tests performed on WL2000

x900

Bottled water is 900 times more carbon intensive than drinking mains-fed water

1 million

bottles are bought every minute with just 9% recycled

ву 2050

than fish

our oceans will contain

more plastic waste

Sources: National Geographic; Euromonitor; World Economic Forum; University of California; Hydration in the Workplace.

Bottle-filling refill stations cut plastic

and provide on-the-go hydration

The impact of the 'Freefill' initiative in 2020











Waterlogic's 'Freefill' initiative encourages organisations and individuals to switch from singleuse plastic bottles to bottle filling stations to access free water refills in reusable bottles. The initiative brings UK businesses of all sizes together to reach the goal of 100 million 'Freefills'. Businesses embracing the ideology, have contributed towards the number of 'Freefills' whilst simultaneously reducing their own carbon footprint.

As a founder member, delivery company **DPD** contributed 488,295 'Freefills' in 2020 from the Waterlogic bottle filling stations installed in their delivery depots. Other prominent bottle filling station customers include Boot's the chemist, Co-op and Londis mini supermarkets and Network Rail, the company responsible for the UK's railway network. Boot's has installed machines in 13 of their Wellness Centres throughout the UK, some of which are being used as vaccination centres for COVID-19. These stores provide customers with a holistic well-being and shopping experience with a 'rehydration station' located next to healthy snacks and drinks. Customers can refill their own bottle or buy a reusable one in-store.

Co-op and **Londis** helped save 55,252 single-use plastic bottles in 2020. **Network Rail** has installed bottle filling solutions in several stations including London Euston, recording 615,012 'Freefills'.



13 Wellness Centres with Rehydration Stations









REFILL YOUR

OTTLE HERE

Remove single-use bottles from the hospitality supply chain

Waterlogic's specialty hospitality brand Purezza Premium Water creates long-term environmental value through sustainable water dispensing solutions that enable hotels, restaurants and cafés to utilise their own locally-sourced water supply to offer to their customers. Purezza eliminates single-use glass and plastic bottles and significantly reduces transportation and logistics costs, helping reduce a venue's negative impact on the environment.

By integrating sustainable practices, venues can reduce the amount of pre-packaged bottled water going to landfills. By the end of 2020, in cooperation with customers, Purezza helped remove around 60 million single-use bottles from the hospitality supply chain and is leading the movement to remove an additional 30 million single-use bottles year-on-year.

60 million

single-use bottles saved from the hospitality supply chain

Joining the green revolution

Thousands of restaurants, hotels and cafés have joined us in reducing their environmental footprint and eliminating single-use bottles in their venues.

The **Four Seasons Hotel Miami** switched to Purezza with the objective of significantly reducing the hotel's reliance on single-use water bottles. In 2020, the solution offered a substantial, direct impact to their carbon footprint with the hotel reporting that they removed almost 275,000 single-use plastic bottles.

> 275,000 single-use plastic bottles removed

CO₂ 22,770,000 grams of CO₂ saved



Sources: Solgaard; NPR

PUREZZA™ PREMIUM WATER



Kimpton Clocktower Hotel in Manchester, UK, part of the global Intercontinental Hotel Group, also switched to Purezza.

"Before we used this system, we bought in 750ml bottles of mineral water and then we had to regularly order this, take deliveries and store the bottles."

"Now we don't have to worry about waste and the disposal of the empty glass bottles which is also a cost saving. Corporate clients like to see venues that think about the environment and this is an easy way to demonstrate commitment as all guests will see and come into contact with the hotel's own bottles of branded water."

Andrew Craggs, Director of Conference, Banqueting & Special Events, Kimpton Clocktower Hotel

CLOCKTOWER

HOTEL

Choose greener consumables

and accessories for your workplace

Our 2019 'Hydration in the workplace' survey reported that 72% of workers feel there is more their employer could do to reduce single-use plastic at work. That's why in 2020 we introduced a carefully selected range of eco-friendly cups and reusable stainless steel, BPA-free and glass bottles. The extended consumables range allows you to create a greener workplace; reducing your reliance on single-use plastic and encouraging good hydration for your workforce, all whilst fulfilling your obligations to employees and to the planet.

Introducing 100% biodegradable and compostable cups

Our Planet cups use cutting-edge bio-plastic technology to offer an eco-friendly, reusable alternative to single-use plastic. The PLA cups are lined with a resin made from corn starch which is a renewable, carbon neutral source and 100% biodegradable and compostable.

Source: Hydration in the Workplace.

The impact of just one customer making the switch

Wates Construction used to be one our largest single-use cup customers. The company moved 100% to Planet cups in 2020, ordering 28,000 cups per month.

28,000 planet cups per month

336,000 single-use plastic cups a year saved from landfill

to compare with paper

Source: Huhtamaki

Plastic cups need to be reused up to 36 times

Help mitigate the use of plastic cups with our cup recycling scheme

Where use of single-use plastic cups is unavoidable, we offer a cup recycling scheme to ensure cups are disposed of responsibly, helping reduce the impact on the environment. We provide a recycling bin that holds up to 500 cups and recycling bags which are collected from your premises on a regular basis. Collections are managed alongside other activities to limit the associated travel emissions.



Using 100% recyclable, non-toxic and non-hazardous materials

We focus more and more every year on using the most environmentally friendly materials. In 2020, we manufactured our first stainless steel dispenser range, the P2 Firewall[™] Bar – Classe Series. Stainless steel is 100% recyclable and up to 60% of the product originates from recycled scrap metal. Its impact on the environment is minimal when compared to other materials: it is not coated with toxic material and does not produce toxic run-off; less energy is required to manufacture stainless steel; and using steel means we make less moulds and parts, reducing the overall carbon footprint of steel-made products even further.

The majority of our dispensers are made of fully recyclable ABS, polypropene and polyethylene thermoplastics with steel, copper and brass components. Our plastics do not contain any Bisphenol A (BPA) or other chemicals harmful to humans and the environment. None of the paints we use contain cadmium or other dangerous additives, and all the materials used in our products are certified RoHS compliant.

Components are independently tested in professional laboratories to confirm the absence of toxic and hazardous substances and compliance to all the relevant standards and directives.



100% reusable filters

Our filters have been designed with not only performance but also with the environment in mind. Traditional filters expire every year and are completely disposed of in landfill as entire units, including the plastic housing. Waterlogic filters offer the option of replacing the carbon material and reusing the plastic housing and caps over and over again.



recyclable, non-toxic and non-hazardous materials



60% composition of stainless steel uses recycled scrap metal



100%

reusable filter housings

Source: Institute of Scrap Recycling Industries



Introducing environmentally-friendly refrigerant gas

We are committed to the responsible use of natural resources, continual development of clean technologies and the replacement of harmful substances with eco-friendly alternatives. In 2017 we made the switch to using the natural refrigerant gas R600a in our water dispenser compressors as an environmentally friendly refrigeration solution, five years ahead of the European ban on harmful refrigerant gases that comes into force in 2021.

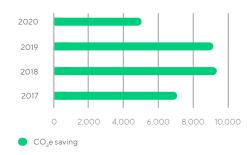
Boasting excellent thermodynamic performance, R600a is non-toxic, has zero Ozone Depletion Potential (ODP) and very low Global Warming Potential (GWP), providing an excellent combination of cooling, energy efficiency and zero environmental damage. It now serves as a functional alternative for numerous chlorofluorocarbon (CFC) or hydrofluorocarbon (HFC) refrigerants such as R134a.

By the end of 2020, compared to using R134a, we reduced the CO_2 equivalent by 99.8% per dispenser, saving a total CO_2 equivalent of 30,881 tons.

R600a CO, saving 2017 - 2020

Gas escape monitoring and alarm systems

LPG and R600a gases are combustible and potentially harmful to humans. With this in mind, the China factory is fitted with ventilation plus electronic monitoring and alarm systems. As gas is heavier than air and sinks to the ground, alarms at floor level pick up first signs of a gas leak and raise the alert. This system is not required by law, but we are committed to investing in the very best technology and infrastructure to safeguard the health and safety of our employees.





Running a 'clean' manufacturing operation

Manufacturing quite rightly comes under a lot of environmental scrutiny. Our factory in China is inspected by the Local Environment Agency and we have all the necessary certificates proving compliance. We are also on route to becoming ISO 14000 certified - a set of rules and standards created to help companies reduce industrial waste and environmental damage. Our U.S. factory will follow suit in 2022.

We are a 'clean' manufacturing operation, meaning that we do not pollute the environment through the production of our products. We recycle all the water we use so that we do not contaminate the water supply with effluent water used in the factory, and we monitor water consumption throughout the process. It's a closed loop operation. Clean water comes in, we use it in our processing, we filter it, purify it and it goes back into the system to be reused.

Neither do we vent toxic fumes into the environment. The factory's only identified emission is fumes from welding. Annual inspection of our welding fumes reveals measures far below environmental concern, yet we invested in a 15-metre high chimney.

Removing mercury lighting from our factory floors and Firewall technology

We almost exclusively use LED lighting in all our factories as it is far more energy efficient and kinder to the environment. Manufacturing plants typically use cost-effective fluorescent lighting containing toxic and hazardous materials including liquid mercury. When the glass bulbs are broken, mercury is released as a gas and is very harmful to the environment and human health.

We have begun the journey to convert the fluorescent lamps used in our Firewall® UVC purification technology to UVC LED systems which use far less energy, last longer and do not contain liquid mercury.

This will take a number of years to conclude, and until then, all our UV lamps are safely disposed of in accordance with WEEE regulations.

90% LED lighting used in the China factory

TYPE	POWER	QUANTITY IN USE
LED	18W	1,140
LED	50W	15
LED	65W	93
LED	85W	13
Fluorescent	40W	136



Tackling site carbon management, consumption and waste

Limiting deforestation and waste using long-service pallets

From warehouse storage to enabling machines to be easily moved in bulk as well as keeping them protected, the China factory uses hundreds of pallets every year. Since 2017, we have purchased 320 recyclable plastic pallets to replace the wooden alternatives.

Although plastic pallets are far more expensive than wooden, they are more environmentally friendly due to the service life of a wooden pallet being considerably shorter. Wooden pallets become unsafe to handle and tend to degrade after only a few uses, and typically have a lifespan of around a year, often ending in landfill. Plastic pallets are more robust, easily sanitised and reusable for between 10 to 15 years.

Whilst the cradle-to-grave carbon footprint of a wooden pallet is relatively low compared to its plastic counterpart, using plastic pallets avoids deforestation and timber imports (which account for 64% of the total import volume of timber in China). When extensively reused, the plastic pallet is an attractive and sustainable alternative to wood.

Source: Research and Markets

Local factory suppliers and reusable packaging scheme

More than 500 companies supply our manufacturing facility in China. We receive a substantial amount of deliveries as well as waste packaging materials with every delivery. To combat this, over the years we have designed a model that reduces shipping and transportation, and removes packaging waste.

We have localised our suppliers as far as possible, whilst still sourcing internationally certified components meeting RoHS standards. We have also developed a reusable and recyclable packaging scheme with our local suppliers. Once their trucks deliver to the factory and offload the items, we return packaging from previous consignments for them to reuse.

In collaboration with one of our largest suppliers, we have completely eradicated cardboard boxes from their deliveries. The supplier, who delivers three times a day, has replaced cardboard with more durable longer-lasting plastic boxes. The expected lifespan of a plastic box is at least three years, compared to a cardboard box which lasts for one or two uses. In addition to this, our supplier of steel components delivers parts in steel cages, which are returned for them to resend parts to us. The steel cages are used for many years.

These major green initiatives mean that no packaging entering our factory is ever discarded. It also means we reduce road miles and the associated emissions by working largely with local suppliers, as well as returning packing during scheduled deliveries.

Streamlining supply chain with less inventory and product simplification

In 2020, we significantly reduced the amount of dispensers being produced by meeting 15% of global demand through stock held. In addition, by simplifying product complexity and reducing the number of SKUs, less variety of product was requested; meaning less waste of raw materials and less emissions linked to manufacturing, storing and transportation.

This combined approach saw us taking 6,222 dispensers out of the supply chain by the end of 2020, resulting in 183,952 less sea and road kilometers travelled and a saving of 1,115 tons of CO_2 relating to transportation from the factory and components used in the production of the dispensers.



Impact of streamlined supply chain in 2020





global demand met through stock

15%



1,076 tCO₂e saved not using components





That's a total of **1,115 tCO₂e** saved (components and freight)



Increasing use of refurbished

dispensers and parts

Each one of our point-of-use dispensers has a carbon value of 173kg CO_2 e relating to the components it uses. Savings linked to refurbishment also play an important part in meeting greener targets, helping to preserve the earth's raw materials and saving components going to waste or being destroyed through carbon emitting processes.

We continue our focus on refurbishing more dispensers and driving more repair of dispensers in field rather than replacing them to reduce the strain on production, leverage the associated environmental benefits, and to meet the needs of customers' own environmental agendas. In 2020 we refurbished 21,624 dispensers with 8,214 of those dispensers fulfilling new rental contracts.

We're expecting to refurbish 27,000 units (+20%) in 2021, and plans are also under investigation to open a European Refurbishment Centre. For those dispensers that reach their end of life and cannot be refurbished, we re-use components. Components that cannot be reused, can be recycled.

We also aim to carry out sub component refurbishment for all removed parts during the refurbishment process. For example, if a front panel is replaced, the old panel is refurbished and re-used as a replacement part for future models. This helps to mitigate and reduce the need for new components which lowers our CO_2 footprint and reduces the volume of components needing to be recycled.



173kg CO₂e

The carbon value of one dispenser relating to the components it uses is 173kg CO₂e



21,624

9%

dispensers were refurbished in 2020



increase in 2020 with 20% increase targeted for 2021

Centralised distribution boasts environmental benefits

The European Central Distribution Centre (ECDC) serves as a single supply chain hub receiving a more streamlined flow of goods from our factories in China and Australia to ports and on to point-ofuse. This provides Waterlogic with a flexible, fully stocked warehouse which can supply markets at short notice and guarantee quality of service to our customers. The ECDC will be the main vehicle for improving inventory efficiency in Europe; only shipping what we need, when we need it.

The first supply of goods to our centralised distribution facility in Born, Netherlands arrived in mid-March 2021. Our freight is barged from Rotterdam Port to Mainfreight's Born warehouse, saving 33,000 kilometers of road transportation and 4,310 kilograms of carbon emissions per annum.

Mainfreight actively seeks ways to leave the lightest possible imprint on the planet while continuously managing their ISO 14001 certified operations to build a sustainable logistics environment. The Born warehouse is BREEAM certified and Mainfreight is one of only 12 shippers and logistics companies in the Netherlands and Belgium that have been awarded 3 stars by the government-run National Lean & Green programme.



Championing green travel initiatives to reduce emissions

Reducing road fuel usage and switching to electric fleet

The UK business have two electric Nissan EV200 vehicles with 10 more planned. We also proactively reduced the number of road miles travelled by our diesel fleet, saving 1,168 tons of carbon in 2020 compared to 2019. We reroute our customer journeys to condense the number of miles travelled, resulting in reduced fuel usage and lower carbon emissions. We also call customers in advance making sure they are open, and we experience almost zero wasted journeys as a result.

Tons of carbon used in commercial vehicles



20192020

1 litre of diesel weighs 835 grams. Diesel consists 86.2% of carbon, or 720 grams of carbon per litre diesel. In order to combust this carbon to $CO_{2^{\prime}}$ 1,920 grams of oxygen is needed. The sum is then 720 + 1,920 = 2,640 grams of $CO_{2^{\prime}}$ litre diesel.

Source: Carbon Footprint Calculator

'Right first time' field service initiative to benefit customers and the environment

To further remove emissions and waste from our supply chain, we plan to roll out our field service enhancement programme. This programme will be delivered across our field service teams who service and maintain our 1.4 million machines in field around the world to:

- Reduce miles and emissions by implementing better technician route optimisation tools and planning scheduled maintenance visits to group co-located services in one trip.
- Consume less material by improving our right first time' fix success rate to limit waste and reduce the emissions associated with manufacturing and transporting replacement materials.
- Reduce unnecessary call-outs and inconvenience to customers limiting road miles and emissions. The aim is to reduce second call-outs to decrease our carbon footprint and save 46 tons of CO₂.



The environmental benefit from a free ride to work

Our China factory employs local people to limit the carbon emissions associated with personal travel into the workplace. The nearer employees live to their place of work, the less impact is placed on the environment. In addition, the company provides eight buses to transport around 35 managers from Qingdao to and from the factory each day, potentially saving 35 individual modes of personal transport and representing just 8.6% equivalent carbon emission. We aim to extend this to all employees.



Saves 0.83 tCO₂e Saves 0.83 tCO, e a week

representing just 14.4% of

total car emissions

Environmentally-friendly bottling plant

We continue to invest in all our hydration solutions to ensure optimum sustainability and efficiency. Owned by Waterlogic, Fillongley Spring Water is the leading water cooler bottler of naturally sourced water in the UK and until recently had relied on a bottling plant installed in 2001. In order to benefit from carbon efficiency and a reduction in water wastage, we improved the Fillongley site starting in December 2018 and throughout 2019 with the installation of a new state-of-the-art bottling plant.

The original bottle washer used 2 litres of water on average for each bottle, washing 1,200 bottles per hour. The upgraded bottle washing machine uses recycled water to wash the bottles, doing it faster at 2,000 bottles per hour and more efficiently. Compared to the old plant, in 2020 only 1.32 litres of water per bottle were used, saving a staggering 1.5 million litres of water.

The new gas boilers used to warm the water for washing use 0.07 kw less energy per bottle, saving 154,000 kilowatts of energy in 2020.

Impact of upgrade to bottling plant in 2020



0.68 litres of water saved per hour per bottle

1.5 million

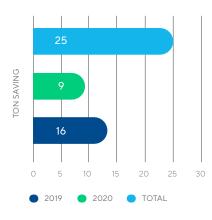
litres of water saved



154,000 kw

of energy saved per hour per bottle

Total CO, savings in tons vs 2018 data



Greener thinking design and manufacturing

Waterlogic accepts that the world faces immense resource depletion and pollution, and we recognise the need for truly sustainable leadership. Throughout our supply chain we are whole-heartedly committed to reducing our contribution to climate change in a responsible and sustainable way, and helping you to meet your own environmental objectives.

Let us help you meet your green goals Call +44 (0) 333 323 2307 Email info@waterlogic.co.uk Visit www.waterlogic.co.uk

Better thinking, better water, better for you, better for the planet[™]

At Waterlogic, everything starts with the way we think about water. Behind every drop of Waterlogic water are years of knowledge, innovation and experience to deliver purified, great-tasting water in the safest and most sustainable way.

And because we design, manufacture, distribute, install and service our own water dispensers, you can enjoy unparalleled product quality including a range of consumables and accessories, and highly responsive Total Care service that is second-to-none.

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