Leaders in innovation

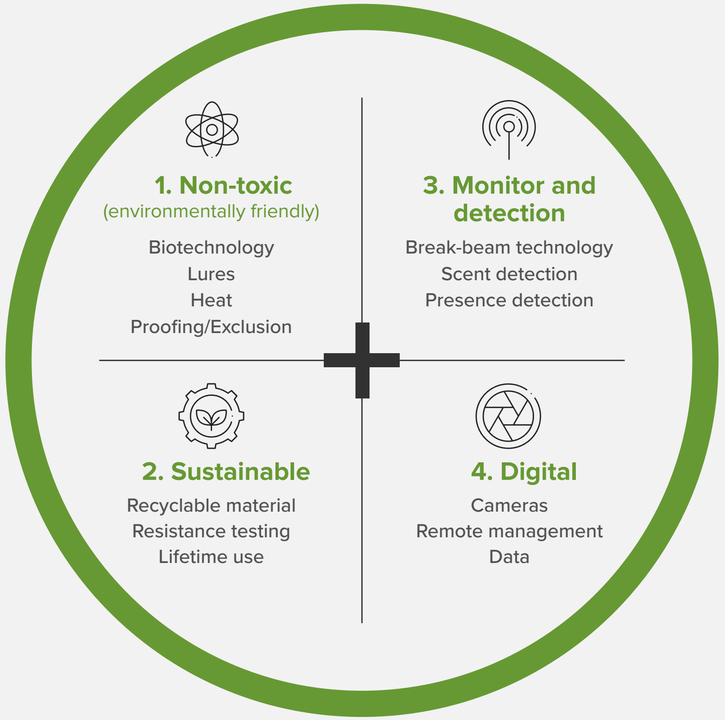
The Company was formed by an innovation to control Deathwatch Beetle in the 1920s and ever since, we have continued to innovate to meet customer needs. Around 50% of our innovation projects have been generated in-house, either by our Science and Innovation team or as a result of insights gained from our businesses around the world. Around 80% of our innovation pipeline is now either non-toxic or sustainable.

Innovation is a core component of our success and embedded within our cultural DNA. We encourage and empower all our colleagues to innovate with the desire to improve customer service. We deploy innovation consistently, targeted at key pest sectors and with potential for new non-toxic and sustainable solutions, which are increasingly becoming an important source of differentiation.

Our core innovation categories in Pest Control are stored product infestation (SPI), rodents, birds, crawling and flying insects. Rodent control accounts for c.$2 billion of the global Pest Control market and continues to grow at c.4% p.a. (source: Allied Analytics).

Recent new product innovations include Dual AutoGate Connect, Riddance Connect, Rodent Ceiling Trap (a ceiling solution for rodent control in gaps above ceilings and which provides indicator alerts to a capture) and our Multi-Mouse Trap product – a monitoring sensor that can be attached to several live catch products for real-time reporting, allowing for early technician support.

Our focus areas in Pest Control



1. Non-toxic

In commercial pest control, the use of chemicals is not our first thought. Before any treatment is considered we survey the premises and consider barriers, such as proofing and exclusion materials under doors or in gaps next to pipes that might solve the pest problem. We then have a range of non-tox or sustainable solutions.

Entotherm heat treatment is a chemical-free method of pest control that is effective through the targeted application of heat against most types of pest insects, such as bed bugs, cockroaches and wood boring insects. It eliminates all life stages of insects (egg, larva and adult) in just one treatment minimising any disruption. It is also suitable for use against moulds and pathogens. This product has eliminated the use of chemicals in these treatments.

In 2020, in Europe, we have run information webinars aimed at the agricultural community to promote the benefits of Rentokil's non-tox biological fly control solution. Flies are a problem for farmers because they not only transmit disease, but they can also cause milk production to decrease. Rentokil's innovative Biofly solution uses parasitic wasps that feed on flies to offer a chemical-free, highly effective solution. The same Biofly solution has also been used successfully to help zoos remove problem fly populations.

> **"The future is digital and data driven, which leads to more targeted propositions based on customers' exact needs; a revolution that is already happening in Pest Control. The future is also diverse and I'm a huge champion of Women in STEM."**
>
> Lizi Jenkins
> **Group Innovation Director**

2. Sustainable
Our focus is on producing new hardware products that use recycled materials, reduce waste or set new standards for emissions reduction.

After five years of working closely with experts in the LED industry, Lumnia is the world's first range of fly control traps to use patented LED lighting technology rather than traditional fluorescent tubes.

As well as external certification from PlanetMark last year for demonstrating 62% lower carbon emissions and removing mercury from the waste stream, we received The Queen's Award for Enterprise: Innovation for the development of this sustainable product.

Lumnia uses LED light to attract and control flying insects hygienically – eliminating the risks of contamination. It is suitable for a diverse range of internal environments – both large and small – with the added benefit of a reduction in energy usage versus traditional electronic fly killers.
Our products include Lumnia Standard (for offices, shops, food retailers), Lumnia Ultimate (using second-generation lamps for high-dependency customers), Lumnia Colour and Lumnia Slim.

To date, over 168,000 units have been installed, delivering significant cost and emissions reductions for our customers.

Eradico, is an innovative, single-solution, technology-enabled rodent bait box that addresses 57 different needs and market requirements. It replaces more than 30 different units, made from different materials.

In 2020, after three years of development, we undertook final testing and trials in 22 countries of Eradico, which is our first hardware product made from recycled polymer. Eradico will launch for 2021. A connected version of the system, called RADAR X, a next generation connected mouse riddance unit, will also be launched in 2021.

3. Monitor and detection
RADAR and AutoGate rodent control units use break-beam technology to identify the presence of a target species, and alerts the technician via the online Command Centre, that a particular unit has been activated.

PestID, an image-based smartphone app, identifies a pest from a photo taken by one of our technicians. Once identified, PestID will recommend the best tools to control the pest, plus important information such as operational safety reminders.

The 'powerhouse' of our innovation programme is The Power Centre. Opened in 2017, this industry-leading facility is home to one of the largest collections of pest insects in Europe, including one of the biggest colonies of Pharaoh ants. More than 30 different species are maintained including German cockroaches, bed bugs, Indian Meal Moths, Australian Spider beetles, Mediterranean Flour Moths, Mealworm beetles, mosquitos and fruit flies. We are the only company in the UK certified to keep termites.

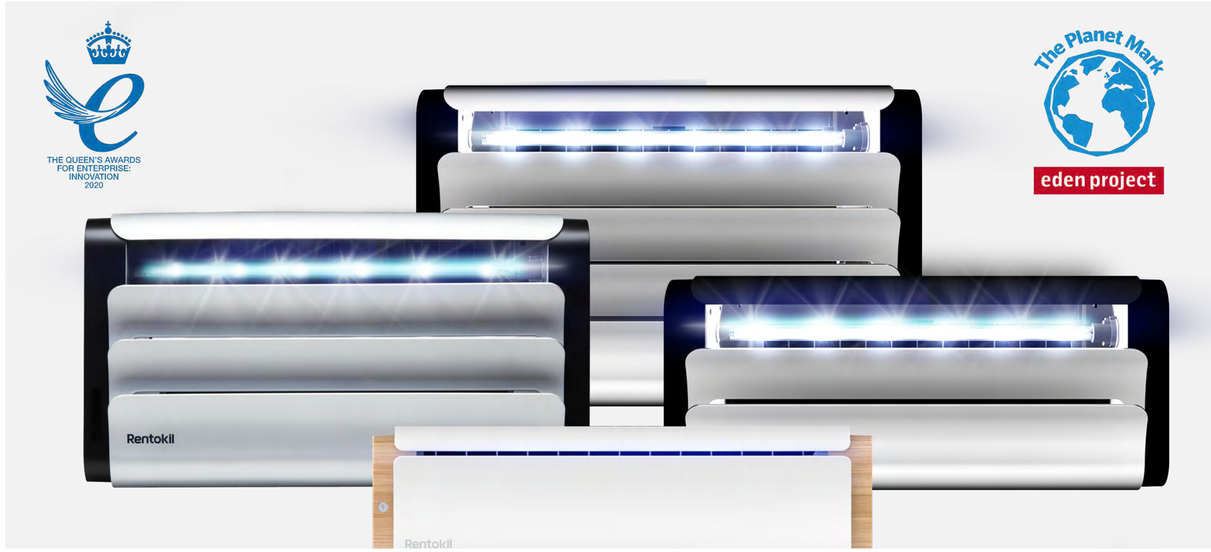
4. Digital
Rentokil Initial uses digital technology to improve the colleague experience, enhance services and reporting transparency for customers, and improve operational efficiency. Our workforce is enabled with smartphone technology and a wide range of apps to improve efficiency.

For instance, ServiceTrak is our field service app. Over 7 million service visits were completed on ServiceTrak in Hygiene during 2020 and c.4.8 million customer signatures were captured on completed visits. At the start of the pandemic, we quickly added a photograph function to include as proof of service with 2.4 million proof of service reports sent digitally to our customers. Also introduced in 2020, was a new digital customer satisfaction survey. 2.6 million responses were received as a result of service visits, with an average score of 4.8 out of 5 for both Pest Control and Hygiene.

In 2020, we launched our first Rentokil website 'chat bot' in the UK to make us more effective, handle enquiries faster and reduce the 'hassle factor' for customers and prospects.

People contact us via our websites for a variety of reasons, but the majority of contracts are sales enquiries. Since launch, 99.7% of enquires to the chat bot have come from new customers, approximately two thirds of which are from residential customers and with just under half of all chats conducted outside working hours. The chat bot is reducing the volume and duration of calls to our Contact Centre, freeing up time for our sales colleagues to focus on other activities.

As a global business which increasingly uses digital technology, we endeavour to ensure that personal data is processed lawfully, fairly and in a transparent manner that takes into account the rights of individuals whose personal data we process whether customers, employees or any others. For full details on our approach to Information Security and Data Protection and Privacy, please see the Governance Section: Data Security.



Case study: Internet of Things Pest Control

Rentokil has developed and rolled out the world's leading digital pest control platform, providing an unmatched level of monitoring, reporting and insight for our customers who face the risk of increased fines and censure, without effective pest management and reporting.

PestConnect is the world's most advanced digital system for pest control and the 'world's smartest mousetrap'. It provides our customers with a completely remote pest detection solution and full traceability. We have seen increased demand for the product in 2020 as customers (including hospitals such as London's Nightingale Hospital, which was specially constructed to support all NHS London hospitals in the event of a surge in COVID-19) have sought to minimise physical on-site interactions with service providers and prevent the spread of COVID-19.

This year also saw our largest commercial contract to date with Tesco, for whom we have installed tens of thousands of PestConnect units across the majority of its UK estate. Since launch in 2016, we have installed over 150,000 PestConnect units across 7,684 customer locations in 26 countries. In addition, 12,000 frontline colleagues in 25 countries now have access to our PestConnect floorplan app to manage PestConnect at scale across customer sites.

We continue to develop and expand our product range, and in 2020 we launched our newest unit, Multi-Mouse Riddance. We will add to our growing range in 2021 with the launch of additional new products for rodents, crawling insects, birds and flies.

myRentokil, our online customer portal provides secure 24 / 7 access to real time information that provides easy access to documentation required for pest control, including reviewing service recommendations and responding to audits. Currently, 1.1 million customer sites and 95% of our commercial customers use myRentokil in 44 countries.

The Command Centre is our central information hub containing data compiled from over 50 countries with 7 billion records, populated with historic and current data to track pest trends and identify emerging risks. 9 million messages were sent or received across our digital pest control network every day in 2020, recorded on the central Command Centre and stored on the Google Cloud Platform.

> **"Our contract with Rentokil is the world's largest contract for connected technology and surely marks the tipping point for digital pest control. For us, as an organisation, data is gold and we need to know at all times what is going on and why, as it is this knowledge that helps us do pest control better."**
>
> Tony O'Donovan
> **Head of Pest Control, Tesco UK**

Our focus areas in Hygiene

Our innovation programme is focused on meeting customer needs inside and outside the washroom, and on digital services. In 2020, we also focused on supporting customers to limit the spread of COVID-19 through Disinfection services.

Washrooms are high-risk areas for COVID-19 and other viruses – they are small spaces, with smooth surfaces and high levels of traffic. 'No touch' washrooms are the most effective way to avoid cross-contamination, particularly within cubicle settings. Toilet paper dispensers that seal away paper until use, 'no touch' feminine hygiene units and toilet seat cleaners all prevent cross-contamination.

Our Signature range of washroom products have antimicrobial surfaces, which help reduce cross-contamination. Outside the washroom the availability of no touch soap and sanitiser dispensers are also vitally important, while air sterilisers provide an ongoing method of removing potentially harmful viruses from the air.

> **"Unlike traditional air purification systems, the VirusKiller™ UVC technology provides a photochemical deconstruction of the RNA and DNA of micro-organisms, deactivating their reproductive processes so that the Coronavirus can no longer spread."**
>
> Dr Colm Moore
> **Area Technical Manager UK, Ireland and the Baltics, Rentokil Initial**

Rapid Hygiene
Our Rapid Digital Hygiene washroom solutions record key statistical data, which can be analysed to reveal patterns, trends and associations relating to product and human behaviours, helping customers become more efficient and sustainable, and able to provide the best possible user experience.

Rapid Foam – a revolutionary, connected, touch-free soap dispenser, Rapid Foam reduces the amount of soap used by up to 90% and its associated plastic waste by up to 96%.

Rapid Water – a touch-free, smart tap that can reduce water consumption by up to 2L per hand wash while offering risk-reduction features for the safety of users.

Example: The introduction of our smart technology at a male toilet in a hotel and office complex, resulted in a 68% reduction in water used when a smart toilet and urinal cleaning system was installed, and 150,000 litres of water saved per year when concussive taps were replaced with low-flow smart taps that automatically cut off to reduce run times by 70%.

Rapid Flush – specifically designed for toilets and urinals to improve odour, reduce limescale and improve the customer experience in high-use commercial washrooms.

Air Purification
Unlike traditional air purifiers that simply trap airborne particles and microbes, VirusKiller™ technology uses a series of carbon and HEPA filters and patented ultraviolet-C (UVC) lamps to trap and kill 99.9999% of airborne viruses, bacteria and fungi.

The lamps are surrounded by a mesh of chromed nano titanium dioxide tube filters that are polished with activated carbon. The emitted UV light reacts with the mesh, and in a process called 'photocatalytic oxidation' produces hydroxyl radicals, which act as a disinfectant and break down the organic molecules.

This all-in-one solution effectively filters dirty air, neutralises toxic air and decontaminates sick air. Different sized units are offered to a wide range of sectors, from offices to education and healthcare, hospitality and leisure venues, and it is hoped that this technology will play an important role in the ongoing COVID-19 recovery, helping businesses and public facilities minimise the risk of airborne transmission when they are allowed to resume normal operations.

Case study: Hygiene Disinfection services

We are proud of the way our teams across the world pivoted at great speed, to launch emergency Disinfection services for our customers in over 60 countries at the start of the pandemic. From food retailers to pharmaceuticals, public transport and e-commerce companies – we played our part by protecting our customers and employees.

Our emergency Disinfection service uses a range of innovative applications to suit every part of a building, to help ensure that every area is disinfected as quickly and effectively as possible, including:

- UV Disinfection
- Disinfection Mist Blowing Space Treatment
- Electrostatic Disinfection

All services are supported by standard operating procedures and the use of PPE, and are carried out by fully trained technicians. As experts in hygiene, we have developed specific Standard Operating Procedures to ensure maximum service efficacy and consistent global standards.

These include, for example, a 19-stage donning sequence for PPE and removal of all waste from sites in line with guidance set out by public health authorities, in order to prevent cross contamination.

In France, our business provided COVID-19 preventative Disinfection services to RATP (public transport providers in Paris), an existing Pest Control customer that manages a fleet of buses, trams and Metro trains.

A dedicated team of 80 technicians and four managers disinfected 250 trams every week and 4,700 buses every night, seven days a week and by the end of 2020, they had carried out over one million preventative disinfection treatments.

Rentokil Initial was also appointed the official hygiene partner of the Saracens Rugby Club, believed to be a first in UK sport, for the restart of their 2019-2020 campaign.

“As a club, caring for our people is at the heart of everything we do and the safety of our players, staff and supporters is of paramount importance to us. Our partnership with Rentokil Initial, a globally recognised brand, provides the venue with an ability to create an environment within which our players and staff are safe, secure and protected at all times.”

Richard Gregg,
Saracens Operations Director