

## **Delivering innovation for our customers**

Veolia is the leading resource management provider in the UK. We have a comprehensive range of waste, water and energy services that are designed to help our customers contribute to a circular economy and preserve natural materials and resources.

We work in partnership with our customers to develop innovations that deliver value by increasing efficiencies and cost savings. These solutions also help to significantly reduce carbon impacts by preserving scarce resources, raising environmental standards and preventing pollution in local communities.



## Responsible business is good business

An introduction from Gavin Graveson, Executive Vice-President, UK & Ireland

We hope you enjoy our latest sustainability update.
This report includes examples of our partnership
working and highlights the real benefits we continue
to deliver to our customers' bottom line, the communities
we live and work in and our employees.

#### We are committed to:

- Resourcing the world
- · Supporting the people we employ
- Playing an active role in the community

What makes Veolia different is that we are focused on preserving resources and manufacturing green products and energy from waste, waste water and wasted heat.

Not only is it good for business, but it is also good for the economy, local communities and the planet, as we drive innovation, create new skills and jobs, and create social impact for all.

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# The world we live in today

Fuelled by a growing population that continues to consume food, materials and resources at an alarming rate, our planet faces huge challenges.

Our oceans are filling up with plastic pollution and accelerating climate change continues to impact fragile ecosystems.

Energy demand is soaring, with global energy use set to increase by 28% by 2040. Meanwhile, England, Scotland and Wales are set to face a 3 billion litres per day water deficit by the middle of the century.

Against this backdrop, there is a need for a new way of doing things, right here, right now; particularly when it comes to managing resources.

Fortunately, doing the right thing is good business and it can be good for your business too.



## Innovation at the heart of partnerships

One of the ways we have driven an innovative culture is through our unique Innovation Den, which aims to develop solutions that help us and our customers resource the world – and it has gone from strength to strength in 2017.



We converted **60,000 tonnes** of used glass bottles and jars into energy saving insulation following investment in a **£10m facility** in partnership with Knauf Insulation at St Helens.



We installed lithium-ion batteries at our Ellesmere Port High Temperature Incinerator (HTI) to **improve the energy and environmental performance**.



We helped to recycle more than **21 million disposable cups** via our coffee cup recycling service for our major coffee and restaurant customers.



We produced **10,000 tonnes** of high quality food grade HDPE pellets from recycled milk bottles at our Dagenham Plastics Facility. Recycling this material requires **75% less energy** to make a plastic bottle than using 'virgin' materials – saving enough energy to power **20,000 homes**.

**INTRODUCTION** 

## **Our strategy**

By working in partnership, we deliver value for our customers across waste, water and energy and create value for:

## **Society and People**

- 220 people completed our apprenticeship programme
- For every £1 spent with the public sector, up to £4 of social value was created
- · Our Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) reporting increased by 22%, demonstrating a more proactive culture towards safety
- A third of our Board is female that's 7% more than the FTSE100 average. Plus, we have a negative gender pay gap of **-0.18%**
- 35% of operatives recruited from groups such as NEETs (not in education, employment or training), ex-offenders and former military (25% above the 10% target for 2017)

### **Environment**

- We operate more than **496MWe** of low carbon electricity generation - enough to light up 1.2 million homes
- We recycle up to **300 million litres** of water for reuse in industrial processes
- Our digital solutions cut water leakage from 22% to 4%
- We produce **220,000 tonnes** of compost at our 12 sites
- We are carbon positive, saving our customers **2 million tonnes** of carbon emissions
- 25% of our revenue comes from the circular economy



### **Economy**

- · We spend £900 million a year with suppliers, **62%** of which is with small/medium enterprises
- · We employ 15,000 people
- We have more than 80,000 customers across public, commercial and industrial sectors
- · We provide energy management to over 100 hospitals
- · We have invested more than £1.5 billion in UK infrastructure, plus another £1 billion is proposed by 2022
- **14** new start-up businesses have been launched through our innovation process, generating around **£6.4 million** in revenue since the Innovation Den was launched in 2013















## **Society and people**

## People are at the heart of everything we do

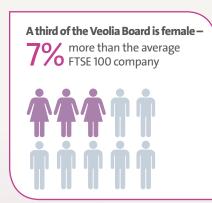
Working at Veolia means being part of a community of people that think differently, move forward together and are open to new ideas and ways of doing things.

We have an active role to play in communities, from fundraising and employee volunteering, to partnering with local charities and setting up community grants. We create social value wherever we operate.



## A diverse business is a strong business

We welcome people into our company from a variety of backgrounds and with different ideas, perspectives and experience. This gives us the diversity we need in our teams to develop new ideas and build a more innovative and responsive business.





#### **Social value recruitment**

In 2017, we launched our Inclusion Strategy to ensure we continue to strive for a more diverse and inclusive business, building on our previous success between now and 2020.

The business far exceeded our social inclusion target with **35% of operatives recruited from groups such as NEETs** (not in education, employment or training), ex-offenders and former military (25% above the 10% target for 2017).

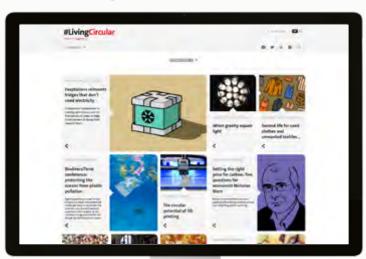


# We support young people and are building a more inclusive, diverse business

We are committed to making sure we have a positive social impact in the communities in which we work and operate. One way we do this is to offer apprenticeships. This enables us to not only play a role in helping to close the skills gap here in the UK, but to also find great new people to work in our business.

Our apprenticeships are industry-focused, offering positions across maintenance engineering, sustainable resource management and mechanical engineering, enabling people to gain technical skills while learning on the job.

## #LivingCircular



## Encouraging others to consider resources more carefully

#LivingCircular is an online resource designed to share inspiration on sustainable models for future growth. By sharing ideas and innovations across social media, we hope to be a catalyst for future progress and to inspire other entrepreneurs, inventors and communities to develop and adopt new models.



220

individuals completed our apprenticeship programme in 2017 and

317
are currently on the programme



# We continue to go beyond compliance on health and safety

As a responsible business, it is crucial that those working for our company are safe at work, so we go beyond compliance to change behaviours and attitudes.

Our 2017 company-wide objectives include indicators such as visible leadership, feedback on near misses and supervisor 'WorkSafe' training. All of this supports our three-year strategic plan to achieve an active risk culture. We will achieve this through effective leadership, engagement and empowerment – and by developing appropriate behaviours so that everyone is actively engaged and is contributing towards collective safety.

2017 saw the development of 'ThinkSafe', a behavioural programme for leaders, managers and operatives. It was supported by a tailored communications campaign, including the use of video blogs of injured people giving accounts as to what happened and how it affected them and their family.



#### **Lost Time Injuries**

2015 - **100** 2016 - **126** 2017 - **157** 

#### **Lost Time Injury Frequency Rate**

2015 - **3.47** 

2016 - **4.17** 

2017 - **5.08** 

There has been an increase in the number of accidents attributed to growth and an even more stringent focus on leading indicators, which focus on future safety performance and continuous improvement.

- The number of near misses and safety concerns reported increased by 3%, demonstrating a more proactive culture.
- Directors visited 224 sites 47% more than targeted to discuss safety on site





Our Teesside Industrial Services team achieved a major health and safety milestone this year by operating over 1 million man-hours without a lost time injury. The feat is all the more impressive and cannot be underestimated given the complex industrial environment of the oil and gas sector.

the European EHSS Contractor Awards ceremony for its performance throughout 2017 as the Best European Contractor in the category covering contracts working between 25,000-50,000 hours on site.

The award is based on EHSS compliance on site and the training and development of our teams.

# Our people deserve respect at work

All of our employees have the right to work without the threat of fear, intimidation or violence. Sadly, this is not the case for some of our team members who find that verbal and physical abuse from members of the public has become part of their job.

Respect at Work is our new programme that supports employees (and their managers) to respond to incidents of verbal and physical abuse from members of the public. In fact, we're the first resource management company to have our own anti-abuse programme.

We believe that there are around 100 cases of verbal and physical abuse happening to our colleagues every day. The programme has introduced a reporting tool to better capture and classify verbal and physical abuse incidents. Through encouraging our teams to report and talk about the abuse they have faced from members of the public, we have seen an eight-fold increase in reports since we commenced the training in October 2017. This data is enabling us to have discussions with our clients and the police regarding how we can tackle this together.





Graham Barker
Recycling Assistant
at Merseyside HRWC



# The community is at the heart of everything we do

We have a key and active role to play in many communities across the UK. From fundraising and employee volunteering, to partnering with local charities to positively give back to communities and individuals, we continue to create social value wherever we operate.



The Veolia Environmental Trust awarded more than

£5.2 million

to 135 community and environmental initiatives in 2017



#### Virgin Pulse Global Challenge

This year has seen a number of teams take part – and compete against other – in the Virgin Pulse Global Challenge to reach 10,000 steps each and every day for 100 days.

Colin Moore, Working Supervisor and James Walker, Sludge Optimisation Engineer at Seafield started a lunchtime running club and covered **1,832 kilometres**, the most distance of all walkers.

More than **300 employees** took part in the initiative, walking a collective total distance of **228,251 kilometres**, the same as walking around the world **5.7** times.



## Make a difference

To continue to support the people of Shetland, we teamed up with our logistics partner Peterson to create the Make a Difference Community Grant. So far, there have been 17 successful applications, with organisations receiving funding up to the value of £1,000 for anything from help to cover promotional and marketing materials, to education and awareness raising, practical equipment and running costs.

Among the recipients was the Disability Shetland Pre-School Group which received £980. The money contributed to activities for families with disabled children.

## Cancer Fund for Children



A small team from our Project Omega water contract in Northern Ireland took on Slieve Donard, the highest mountain in Northern Ireland at **850 metres**. The feat raised more than £2,500 for Cancer Fund for Children.





#### Helping the Community



As part of our contract with Telford & Wrekin Council, £18,034 was awarded to community groups in 2017. The Hartshorne Court Lunch Club was one of the successful recipients, receiving £1,000 to introduce an outdoor gym to benefit older members of the community. The annual initiative allows community groups to apply for up to £1,000 for projects that benefit the community or environment, with sports groups able to receive up to £500 to support clubs and opportunities for the wider community.

AVA

# The community is at the heart of everything we do

### London Recycling Fund

Our London Recycling Fund has pledged almost £20,000 to 20 community projects across the capital – money that will be used to boost schemes that support the local environment, reuse or recycling.

For example, the Tritton Vale Pocket Garden in West Norwood was nothing more than a neglected grass verge a year ago. Now, it is an established community garden which has made use of thousands of litres of our Pro-Grow compost and even raised money to have a rainwater harvesting system installed.



### Veolia supports Cancer Research UK's Race for Life

We extended our service to Cancer Research UK by providing the recycling services for **over 120 Race for Life events**. With thousands competing, this additional voluntary support backs the collection and recycling contract that covers over 600 Cancer Research UK shops across the country.

Volunteers play a vital part in the success of all Race for Life events and as well as managing all the waste services, Veolia's teams are also playing their part in the events, either directly as participants or as part of volunteer support teams.



## Closing the loop on old uniforms

Our Southwark integrated waste management facility joined forces with the charity Reuseful to close the loop on our old uniforms. The project, known as Re:Form, sees old uniforms and personal protective equipment diverted away from landfill and used to create upcycled, sustainable garments.

The scheme, which won the Rushlight Resource Recycling Award, also gives back to local communities via a back-to-work training scheme, which gives hundreds of people new creative skills through sorting, upcycling and re-selling the donated items.

Following the success of the partnership, we're now looking to launch Re:Form at other sites across the UK.



## Ten years' of hard work

Ten years' of hard work with Shropshire Council was celebrated with a one-off Make a Difference campaign in 2017. The scheme awarded a total of £15,291 to groups and societies with gifts of up to £500 to help their work in making Shropshire a better place to live and visit. One winner was Shrewsbury Food Hub, a charity which collects surplus food from supermarkets and shares it fairly in the community, which received funding to purchase chiller boxes to store surplus food.

We are a very community minded company and are always striving to do our part to support local projects and ventures.

Steve Mitchell, Director – West Midlands



## Local Heroes, every one



We couldn't achieve what we do without the contributions of every single one of our employees and we created the Local Hero Awards to celebrate their achievements.



It is an annual event which recognises and rewards employees for the role they play in making Veolia a responsible business and to celebrate our success. More than 8,000 employees took part in the awards in 2017. Here's a selection of our winners.

My team worked through the night to fix a hospital's heating emergency. We're not doctors, but our work helped to save people's lives.







**Liz Lewis** HR. Cannock



Liz is always looking for ways she

employees in less than 24 hours.

Graeme Waters has been one of the recycling loaders on our contract with the Royal Borough of Windsor & Maidenhead for the past six years.



He deservedly won the Saves The Day Local Hero award for his care, attention and quick response in helping an elderly lady that he spotted laying motionless near her home during one of his rounds in Cookham. She had hurt her arm in a fall and had been out in the cold for several hours. Graeme quickly rushed to her aid, acting as first response and was able to comfort her until an ambulance arrived.

Rescuing residents isn't written in my job description, but being out and about, we're often the first on the scene after an accident.

Variety is one of the main reasons I enjoy my job so much. The most rewarding part is helping residents and ensuring you have a positive impact on the people in the local community.

**Graeme Waters**Operative, Windsor



## We work closely with local suppliers to support them

Wherever possible, we do business with small, local suppliers, working closely with them to develop action plans to improve their environmental, social and business performance.

We will only work with suppliers that meet our social and environmental standards, including supporting human rights, as laid out in our Procurement Policy. We audit those considered to be high risk. Our Procurement Team is well embedded across our business to ensure we deliver fair and honest practices that support our suppliers.



In 2017, small and medium-sized enterprises (SMEs) received more than

62%

(£558 million) of our procurement spend Globally, 57% of our framework agreements have had the sustainable development clauses signed by the suppliers

## **Tackling** modern day slavery

**Following the Modern Day** Slavery Act, which came into force in 2015, we amended our **Sustainable Procurement Policy** and developed a statement on the Modern Day Slavery Act to ensure there is no slavery in our business and supply chains.

We also ran training sessions and integrated the Modern Slavery Act into our Whistle Blowing policy. In 2017, we began to share this best practice with our supply chain via a series of webinars.

The actions we take to ensure our strategy.











# Creating value for industry and business

## Making resources go further

Industry and business are facing an era of unprecedented change, particularly from technological advances driven by developments in artificial intelligence, robotics and the 'internet of things'.

And in the wake of Brexit, and the uncertainty it brings, industry and business are in need of a steady and sustainable supply of energy, water and resources, especially when faced with ever-fluctuating and unpredictable costs.

In increasingly competitive markets, we are working in partnership with our customers to help find efficiencies keeping abreast of regulatory compliance.

Manufacturers are taking sustainability seriously so that they can manufacture products faster and more efficiently than ever before. Businesses also find themselves under more pressure to be good, positive members of society, as their customers are becoming more aware of sustainability issues.

Whether it's avoiding landfill costs, developing water efficiency solutions or improving energy efficiency, our teams have the expertise to help our customers exceed their environmental goals and continually find ways to improve their bottom line.



**FOOD AND BEVERAGE** 

## Optimising operations for the long term

The UK's food and beverage manufacturers are under pressure to deliver competitive pricing. We're working with them to develop innovative and efficient solutions to optimise processes and operations, while guaranteeing security of energy and water supply for the long term.

By unlocking value within process waste for either reuse or sale, and recycling wastewater, our customers can typically find cost and carbon savings of up to 20%, and in some instances up to 30-50% off their energy bill.

We all know that materials, energy and water are essential to industry, but the cost and availability of these have a direct effect on our customers profitability and the all important impact on the environment. By developing new ways of resourcing industry we have made real steps towards a true circular economy, one where nothing is wasted and the environment is preserved for future generations.

**Kevin Hurst**Management Board



**FOOD AND BEVERAGE** 

#### Case study

## **Leeming Biogas**

The Leeming Biogas facility in North Yorkshire is one of the largest gas-to-grid anaerobic digestion plants in the UK, recycling food waste to provide renewable energy. We provide 24/7 year round technical expertise to manage incoming waste streams and optimise the operation of the plant. This transforms the waste into renewable biogas for the gas network and generates renewable electricity and heat.

## Together we...

- Produce renewable biogas for 4,000 homes
- Generate **4,818MWh** of renewable electricity a year
- Generate **7,227MWh** of renewable heat a year
- Derive biogas from 80,000 tonnes of food waste and by-products
- Produce organic bio-fertiliser for local agricultural use

The project is a real example of how renewable technology, local resources and businesses can collaborate with city investors to develop a sustainable and environmentally friendly commercial enterprise. The plant has helped local businesses cut costs and boost their environmental credentials.

**Mike Dunn**Director, Iona Capital



CHEMICAL & PHARMACEUTICAL

# Guaranteeing business continuity via a secure, quality supply of utilities

To deliver a cost effective and sustainable future, our customers in chemicals and pharmaceuticals are focused on cost savings and waste reduction.

We are working with our customers to guarantee business continuity by enabling them to self generate energy and delivering secure, stable utility supplies. Recovering new revenue streams from waste is also helping to future-proof companies across the sector as we help to improve waste, water and energy management.

#### Case study

#### **CF Fertilisers UK**

The UK's largest fertiliser manufacturer, CF Fertilisers, produces nitrogen, and its Billingham operation consists of an ammonia plant, three nitric acid plants, a carbon dioxide plant and an ammonium nitrate fertiliser plant. To maintain its production process, the business needs stable, high-volume supplies of steam. We worked in partnership to fund, design, build, operate and maintain a steam-generation facility – a £4 million installation that included the largest shell boilers in the UK.

## Together we...

- Built a high efficiency plant that minimises environmental emissions
- Generate **90 tonnes** of steam per hour
- Invested £4 million
- Stabilised energy costs

Veolia gives us the assurance of support for our 24-hour processing operation.
This enables us to maintain the quality of our product and gives us managed control of our maintenance expenditure.
This greatly helps our long term planning and cost control.

**CF Fertilisers UK** 



## George's story...

George has been working with our partners at GSK and supporting the commercial viability of turning waste starch into glucose – designing a process to replicate the work being done in labs to an industrial scale.





## Cleaning up with the Hull industrial team

Many of our industrial and commercial customers can benefit from the efforts of our Emergency Response teams. For example, our team in Hull cleaned up 12,000 litres of spilt paint on the M606 after a HGV crash in Bradford.

Working together with the West Yorkshire Police, fire services, Highways and Environment Agency, the team created dams to stop paint getting into drains and the local watercourse, and used a tanker hose to vacuum the paint off the roads. Finally our jetting team ensured the road was safe and in tip-top condition.

The salvaged waste paint was then taken to our site in Norwood where it was blended through a secondary liquid fuel system and used as a feedstock for the cement kiln industry.

OIL & GAS

# Cutting edge solutions reduces downtime and maintains high standards





## Meet our newest member of the team: Uri the dog



Our team in Grangemouth, Scotland have a new starter: a guide dog named Uri who helps his owner, Cost Engineer John Riddock, to be more mobile.

John was diagnosed with a progressive eye disease called Retinitis Pigmentosa ten years ago, which has led to him being registered as blind with very little peripheral vision.



OIL & GAS

#### Case study

#### **Shell Leman**

We're decommissioning Shell's Leman BH off-shore platform, originally located 50 kilometres from the Norfolk coastline. Our cost effective decommissioning service safeguards people, protects the environment and reduces costs. This project involves decontamination, deconstruction, waste management and environmental services, together with the associated integrated logistics and marine services.

## Together we...

- Created 10 new jobs
- Achieved an impressive 99% recycling rate on the decommissioning
- Recovered usable assets for re-use in industry
- Recovered more than 80,000 tonnes of off-shore materials and achieved 'excellent' environmental assessment ratings in the process





(
It's amazing what you find left behind on an off-shore oil rig.

platform given to Foodbank

The 150 kilograms of food left unused on the Buchan Alpha platform, which we decommissioned, was donated to Shetland Foodbank, including long-life tinned goods and biscuits which were left in the platform's stores.

Supporting the communities where we operate is a key part of our local commitment and we are pleased that this donation will help support people in Lerwick and across Shetland.

Ian Williams
Central Region Director



RETAIL

## Unlocking cost and carbon savings for competitive retailers

Retailers are under real pressure to do the right thing, by their customers and the planet. We're working in partnership with some of the biggest brands in retail to improve their sustainability performance – improving energy efficiency, resource use and saving costs and carbon, both at retail sites and across the supply chain.

Typically, our retail customers reduce costs and carbon emissions by around 30%.

#### Case study

#### Tesco

As Britain's largest retailer with more than 2,500 UK stores, energy is essential to maintain the retail environment and to ensure refrigerated and frozen product quality. To meet the demand for energy in its stores and with a zero carbon emissions target by 2050, the retailer looked for cost effective solutions to meet these aims. We worked with Tesco to implement a large-scale combined heat and power (CHP) programme, providing the design and build services to install new CHP units to produce electricity and heating.

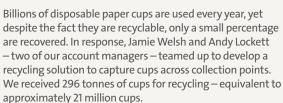
## Together we...

- Installed CHP units on 93 sites covering 2,933 acres of retail space
- Made significant annual energy cost savings
- Cut CO<sub>2</sub> emissions by **7,332** tonnes a year
- Installed a total capacity of 17.3MWe
- Generated more than 470,000 hours of low carbon decentralised energy per year

In a world fast moving toward smart grids and distributed generation where end-users are rewarded for their 'flexibility' in changing their consumption patterns, CHPs provide Tesco with an important lever to mitigate rising energy costs.

Filippo Chiettini, Energy Manager, Tesco

## Taking on the war on paper cup waste



We dedicate ourselves to supporting customers, like Costa, to reach their sustainability goals and welcome their commitment to invest in recycling. Funding towards greater collection capability is a step in the right direction.

We all have our part to play and there is plenty more to do, with millions of disposable cups still not entering recycling streams. If more packaging was made easily recyclable and contamination minimised, we would be able to reuse even more material.

**Richard Kirkman Management Board** 







RETAIL



**CREATING VALUE FOR INDUSTRY AND BUSINESS** 

## Advancing road safety with £5 million investment



We're bringing innovation to our own fleet of vehicles with the aim of advancing road safety for other road users, pedestrians and cyclists. We are investing £5 million over the next two years in low entry, high vision vehicle cabs which will actively support Transport for London's CLOCS programme to enhance road safety.

We're working in partnership with the commercial vehicle design team at Renault Trucks UK to deliver cabs with enhanced driver visibility.

By working with Veolia we have been able to gain a real insight into the complexities of its operating environment and deliver an ex-factory solution designed around its urban cycle. This project has helped us to look at how, by working with our customer and taking an innovative, solutions-based approach, we can make significant, cost effective advances in safety and operational performance.

#### **John Avery**

**Renault Trucks National Fleet** 











**AIRPORTS** 

# Helping airports to carefully manage their resources

Like many other large infrastructure developments, airports must carefully manage resources at a strategic level to offset their carbon impacts and meet sustainability goals, while also managing any commercial expansions sustainably.

We work in partnership with airport authorities to help guarantee business continuity via a secure supply of utilities, unlocking annual savings by minimising leaks and introducing smart billing for concessionaires with our cutting-edge solutions.

## Case study

#### **Edinburgh Airport**

Scotland's busiest airport, carrying 12.3 million passengers a year, wanted to move away from simple data handling and reporting towards a value added energy management service that would help to define KPIs, find energy savings projects and assess performance. We worked in partnership to define a best value for money meter scope, install an automated data collection system on 100 electricity and gas meters within a week and configure meter imports and automated reports on an online platform.

## Together we...

- Achieved real-time visibility and transparency on energy usage
- Saved an estimated **10%** on energy costs with Hubgrade
- Built automated consumption reports and energy performance reports
- Cleansed data



Cat works closely with our Operations and Customer Service teams to standardise processes as well as identify technology improvements. She has helped to implement new means for customers to get in touch with customer service teams, including

live chat and SMS messages.
Above all, she makes life easier for our customer support teams by equipping them with what they need to do their job to the best of their ability.

**Catriona Blair**Business Systems Analyst







**HOSPITALITY & LEISURE** 

## Tackling food waste, the biggest challenge for the industry

Food waste remains the biggest challenge for our hospitality and leisure customers and we work in partnership to help prevent avoidable food waste. We are also helping customers achieve rates of 100% diversion from landfill and developing bespoke on site waste improvement programmes to boost their bottom lines.



#### **JD Wetherspoon**

With around 900 premises, Wetherspoon is one of the UK's most prominent pub chains. We work together to make sure everything from potato peelings and coffee grounds are handled sustainably and to increase recycling by diverting all waste from landfill. We're also innovating to enable wider use of recyclable products, increasing the amount of sundry items that are manufactured from recycled products such as drinks trays and garden furniture.

## Together we...

- Make sure 11,500 tonnes of food waste avoids landfill
- Achieve a 100% landfill diversion target
- Provide 3,450 MWh of renewable energy a year – enough to keep 1,641 beer fridges cool

We're pleased to highlight our commitment to a genuinely sustainable

future by entering into partnership with Veolia for the management of our general waste, food waste and glass recycling.



Contractor Performance Manager, JD Wetherspoon





After a successful five year contract, we were only too happy to sign an extension of two years. Since working with Veolia, our recycling has benefited a great deal. Above all, Veolia keeps us legal and provides us with monthly statements and breakdowns of the different waste streams. Even on a weekend or early mornings, Veolia has always risen to the occasion and made it happen.

#### **Ricky Hards**

Operations Support Executive, P&O







# Creating value for public sector customers

## **Cutting costs and boosting recycling**

With austerity measures in place since the beginning of the decade, public spending continues to be squeezed and put under scrutiny. So, it is crucial that we work with our public sector customers to reduce costs, unlock value in waste, and deliver real value for money for local people across the UK, while encouraging people to recycle more.

We continue to provide the wide range of services and facilities people have come to expect, while reducing carbon emissions. Our public sector customers typically save 20% in both costs and carbon emissions with our innovations, such as district heating and energy from waste

We unlock the value of municipal waste by increasing recycling and recovery by up to

70%



**LOCAL AUTHORITIES** 

# Delivering safe and reliable services, while saving costs and carbon

In the wake of widespread austerity measures imposed on local authorities, doing more with less is the order of the day.

We work in partnership with councils to develop resource management solutions that will continue to deliver services that local residents have come to expect, while boosting recycling rates, finding energy efficiencies and contributing to improved local community environments.

## Merseyside Recycling and Waste Authority

Working in partnership with Veolia, we are delivering improved and quality waste and recycling services to Merseyside and Halton Council tax payers. Together with residents and communities we are aiming to significantly boost recycling rates and provide sustainable resource solutions for the future.

#### **Carl Beer**

Chief Executive,
Merseyside Recycling and Waste Authority

We provide around **4,500** 

homes with heat produced from their own non-recyclable household waste







**LOCAL AUTHORITIES** 

#### Case study

#### **Wyre Council**

Wyre Council serves 100,000 people in the area north of Blackpool. With local authority spending cut by a fifth since 2010, the Council decided to introduce a charged-for green waste collection service rather than the free food and garden waste collection service it operated since 1999. We worked closely with the Council to develop an in-depth awareness campaign among residents prior to the launch of the service.



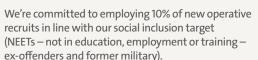
- Generated revenues of £700,000 for the Council
- Reduced the deficit by 70% in the first year
- Achieved an 80% sign-up rate double the expected amount
- Achieved 23,000 green-waste subscriptions
- Achieved a 90% resident satisfaction rate

Due to central government cuts and the end of the Cost Sharing Agreement, the Council needed to look at other ways to bridge the financial gap. Veolia worked with Council Officers every step of the way to make the transition seamless and the collection crews went the extra mile on many occasions.

#### **Ruth Hunter**

Waste and Recycling Manager, Wyre Council

## Welcome to Veolia, after 22 years in the Royal Navy



Bringing a unique skill set and experience to the team, ex-military personnel like Adam Thornton are a real asset. He joined Veolia in 2013 as a Shift Team Leader at our Four Ashes Energy Recovery Facility. Before that, he spent 22 years in the Royal Navy as a Marine Engineering Mechanic.

Adam decided to leave the military so he could spend more time at home with his growing family. He found his role at Veolia after he was contacted by our recruiters looking specifically for his leadership and management skills.

The biggest difference I've found coming into civilian life is how much the style of work can vary.

**Adam Thornton**Shift Team Leader







**DISTRICT HEATING** 

# Delivering low carbon heat for communities everywhere

Our district heating solutions are designed to deliver the best energy efficiency for the communities they serve.

We supply centralised heat and electricity and cooling. Our innovative systems use low carbon combined heat and power (CHP) plants and include renewable biomass energy solutions.

#### Case study

#### **Hale Village**

Hale Village is a modern housing development in Tottenham Hale, London, consisting of more than 2,000 eco-friendly homes. Hale Village Properties wanted each home to achieve the standard for Code Level 4 Sustainable Homes, requiring each property to be more energy efficient than homes built to 2006 Building Regulations. We designed a biomass district heating scheme using wood pellets as carbon neutral fuel to meet all the hot water and heating needs of the homes attached to the scheme.

## Together we...

- Cut CO<sub>2</sub> emissions by **2,640** tonnes a year
- Provided renewable heating to more than 2,000 homes
- Supplied the whole community, including commercial buildings
- Created a London Climate Change Zone compliant development

We were impressed with the way Veolia kept us involved in all aspects of the development of the supply agreements and commercial structure. The high level of customer care they have demonstrated has created a level of trust that issues will be resolved quickly and efficiently.

#### **Nigel Fletcher** Finance Director

Finance Director, Lee Valley Estates





Ellie's story...

Ellie oversees the operation of our District Heating Customer Care helpdesk, a crucial front-line service for UK residents. In fact, she drove the project to have the helpdesk established and she also provides continual training to helpdesk staff.

Ellie also manages a project to internalise the billing for 542 residential customers at an existing London district heating scheme providing significant future cost savings.

**Ellie Blacklock**District Heating Project Manager



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## YOU & SUSTAINABILITY

**HEALTHCARE** 

## **Finding efficiencies** for NHS Trusts

The healthcare sector in the UK plays a large role in the country's economy and includes NHS and private hospitals, clinical and dental services and laboratories.

Now, more than ever, hospitals and acute trusts need to strike the right balance between managing costs and efficiencies and providing a high level of patient care. The healthcare system is dealing with rising costs, while budgets are under constant pressure. We work with our healthcare partners to improve the way they manage their waste, water and energy at large and complex sites.

We currently provide energy management to over 100 hospitals across the UK – helping them to lower CO<sub>2</sub> emissions and unveil significant cost savings that can be put back in to crucial patient care.

### Case study

#### **Sussex Partnership NHS Foundation Trust**

The Trust provides mental health services, specialist learning disability services, and community and inpatient care at around 80 locations across East and West Sussex and Hampshire. We have worked in partnership since 2000 to manage and deliver a range of facilities services including engineering, maintenance, waste management, laundry, gardening and pest control. Our dedicated team of 70 support services cover CCTV, lifts, emergency generation and electrical supplies, heating, ventilation and air conditioning (HVAC), lighting, medical furniture and medical gas supplies.

By providing 24-hour cover, Veolia has enabled the Trust to focus resources on patient care. The service gives us the support we need and enables us to commit to long term plans with stable running costs.



## Together we...

- Focus resources on patient care
- Handle cost control and make savings
- Give access to specialist teams
- Ensure environmental compliance
- Achieve NHS strategic objectives
- Create a better healthcare environment to improve patient outcomes

## **National Apprentice** of the Year

Every year, we recognise the vital role apprenticeships play in our business by hosting the National Apprentice of the Year Awards. The 2017 winner is Taylor Halsey, a Lead Engineer from Greenwich and one of 220 individuals that completed our apprenticeship programme in 2017, earning while they learn new skills and better

**Taylor Halsey National Apprentice** 2017 Winner



























**EDUCATION** 

# On campus to maximise the value of waste

With schools and universities facing further budget cuts to 2020, we are helping our education customers find ways to maximise the value of their waste.

Not only are we increasing recycling rates and diverting more waste from landfill, we are also working together to find better ways of optimising water use and enhancing energy efficiency in buildings. In fact, we're providing low carbon power for around 244,000 students on over 60 campuses.

### Case study

#### **University of East Anglia**

We are helping the University to cut its carbon emissions through a new 10-year combined heat and power contract. At the heart of this are two of the latest generation Veolia combined heat and power (CHP) units, installed to deliver secure energy supplies and deliver low carbon heat and electricity at the 320-acre campus through a district heating and cooling network and electrical infrastructure.

These latest CHP engines replaced the original engines installed in 1999 and, along with a third existing CHP engine, will allow us to generate over 80% of electricity on site, reducing costs and CO<sub>2</sub> emissions.



Head of Energy and Utilities, University of East Anglia

## Together we...

- Installed CHP that will reduce campus carbon emissions by 35% by 2020
- Produce 30GWh of clean electricity a year
- Cut annual carbon emissions by a further 4,000 tonnes
- Maintain energy supply for 18,800 students and staff
- Achieved the carbon reduction target two years ahead of schedule

## Julie's story...

Julie is a pivotal charity champion making our partnership with FoodCycle a great success. She dedicates her own time to raise awareness and encourages others to volunteer and become involved in fundraising activities.

#### **Julie Hunton**

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Receptionist & Visitor Coordinator, Southwark





# Creating value for the water sector

## Making water go further and finding efficiencies in water

The world faces a number of challenges when it comes to water supply, with people in many countries at the mercy of fluctuating access to suitable freshwater. Even in the UK, there is real pressure on water supplies as the country gets ready to accommodate an estimated 10 million extra people in the next 20 years.

So to deliver value for money to the communities they serve, our water sector customers continue to look for efficiencies and to conserve water where possible.

As the UK's fourth most energy-intensive industry, there is also pressure to reduce energy use. Around 3% of UK generated electricity is used for pumping, water treatment and wastewater management. We work with our customers to continually optimise processes to drive down costs and reduce the environmental impact of the water sector.

More advanced technologies now mean that biogas from all the available sewage could deliver an estimated 1,697GWh — enough electricity to power over

half a million homes



**WATER COMPANIES** 

Power from wastewater sludge and food waste generates enough renewable electricity and heat for **91,000 homes.** 

Our range of digital solutions cut water leakage from 22% to below 4%



#### Case study

#### **Scottish Water**

We're helping Scottish Water achieve its target of energy self-sufficiency at its Seafield Wastewater Treatment Works, the largest treatment works in the east of Scotland. We've extended the site's capability to generate its own energy from 55% to more than 85% by boosting the renewable energy derived from a combination of anaerobic digestion of sludge and biogas-fired combined heat and power (CHP) plants. In fact, full self-sufficiency has already been achieved at various points during 2017 when Seafield used no electricity from the Grid.

## Together we...

- Reduced energy costs by 50%
- Increased biogas production by 13%
- Generated the energy to treat 300 million litres of wastewater per day
- Produced **30,000** tonnes of organic fertiliser for agriculture
- Reduced sludge by 45% equivalent to more than 1,000 tipper truck journeys per year
- Reduced energy consumption by 1,800 MWh



## Local Hero



After an urgent incident involving the mains water supply to Tidworth, the team worked quickly and efficiently through the night and over a bank holiday weekend to keep the site operating. Their efforts ensured the site remained operational until a permanent solution could be put in place.

**Stephen Clarke** Tidworth





Protecting the planet while finding new value in resources

As a business offering services in waste, water and energy, we have a unique role to play in helping to deal with some of the biggest environmental challenges the world faces. In the context of a warming planet that is experiencing an accelerated depletion of natural resources, switching out of fossil fuel based energy and making sure we do more with less is going to be crucial. We can help to support this transition.

Our approach is to adopt a circular economy model to help our customers reduce the amount of energy and water being consumed, while finding extra value in their waste. We're doing the same in our own operations too, investing in new technologies and developing new methods at our sites to reduce our exposure to energy price fluctuations and water scarcity, while continually reducing our greenhouse gas emissions.

**Typical benefits to customers:** 

## 2 million tonnes

of CO<sub>2</sub> equivalent emissions avoided

20% carbon and cost savings, and up to 30–50% off their energy bill

Direct (scope 1) emissions (tonnes CO<sub>2</sub>e)

## YOU & SUSTAINABILITY

**ENVIRONMENTAL PERFORMANCE** 

# We are a carbon positive business

25% of our revenue is from the circular economy

By 2020, we aim to reduce our global  $CO_2$  footprint by 100 million tonnes in our own facilities and for our customers we aim to save 50 million tonnes of carbon. Right now, we help our customers save 2 million tonnes of  $CO_2$  equivalent emissions each year.



#### In 2017

- We produced 220,000 tonnes of compost at our 12 sites
- We produced 10,000 tonnes of new plastic for food packaging
- We recycled over 350 million glass bottles for the manufacture of roof insulation
- We recycled 178,000 TVs and monitors
- We converted 2,500 tonnes of old paint into new paint
- We transformed 2.3 million tonnes of non recyclable waste into green energy
- We converting over 200,000 tonnes of waste wood into energy - enough renewable power for 25,000 homes saving 143,000 tonnes of CO<sub>2</sub> per year

- We tracked and reported greenhouse gas emissions for over **600 sites**
- We recovered and re-used 6,386 tonnes of solvents for use in paint thinners
- We operated more than 496MWe of low carbon electricity generation – enough to light up 1.2 million homes
- We produced more than 613GWh of renewable electricity using biogas and biomass avoiding over 328,000 tonnes of CO<sub>3</sub>
- We used 248,000 tonnes of customer waste by-products on site to generate carbon neutral energy for industry

#### Waste Water **Energy Total** 2015 - 1,247,280 2015 - 6,106 2015 - 644,359 2015 - 1,897,745 2016 - 1,309,441 2016 - 6,286 2016 - 603,024 2016 - 1,981,751 2017 - 1,292,791 2017 - 516,914 2017 - 5,814 2017 - 1,815,518 Indirect (scope 2) emissions (tonnes CO<sub>2</sub>e) Waste Water **Energy Total** 2015 - 35,207 2015 - 40,001 2015 - **9,425** 2015 - 84,633 2016 - 32,145 2016 - 31,855 2016 - 34,154 2016 - 98,154 2017 - 29,100 2017 - 79,955 2017 - 25,812 2017 - **25,044** Avoided emissions (tonnes CO2e) Waste Water **Energy Total** 2015 - 863,436 2015 - 1,322,976 2015 - 41 2015 - 2,186,453 2016 - 769,716 2016 - 1,375,946 2016 - 203 2016 - 2,145,862 2017 - 637,385 2017 - 1,352,395 2017 - 112 2017 - 1,989,892

- We are carbon positive, saving our customers 2 million tonnes of CO, equivalent emissions each year.
- We maintained greenhouse gas emissions at a similar level with a positive Carbon Performance Ratio (CPR) of 1.05 against a background of business growth.
- On-site initiatives on upstream and downstream processes produced a significant reduction in emissions.
   Minor variations were due to the methodologies used to calculate the figures e.g. decreases in Energy Recovery Facilities (ERFs), fugitive methane emissions from landfill and changes to avoided emissions due to the decarbonisation of the Grid.

CPR is the calculation of avoided emissions divided by the total of direct and indirect emissions

2016 Waste, Water and Energy

2017 Waste, Water and Energy SOCIETY
AND PEOPLE

CREATING VALUE FOR INDUSTRY AND BUSINESS CREATING VALUE FOR PUBLIC SECTOR CUSTOMERS

REATING VALUE FOR THE WATER SECTOR

ENVIRONMENTAL PERFORMANCE

# **Conclusion: Sustaining the planet for future generations**

As this year has unfolded, what is exciting is that the circular economy is no longer just a concept.

The fall-out from Blue Planet II is not going to go away and public concern about marine conservation has been echoed by the big brands. This has led to siren voices calling for a new plastics supply chain designed to improve resource productivity and protect the environment.

The momentum behind the plastics revolution seems unstoppable and at Veolia we see this as the catalyst for the transition to a wider circular model across a wide range of materials.

By 2020, 32% (£650 million) of our revenue will be from the circular economy. So let's join forces and make the change to benefit the world, the people we employ and our communities.



To preserve the future we have to act together now. For more information visit: www.veolia.co.uk/sustainability

Do you have a challenge that could benefit from resource efficiency and circular thinking? Please get in touch at: <a href="mailto:uki.sustainability@veolia.com">uki.sustainability@veolia.com</a>

Resourcing the world

