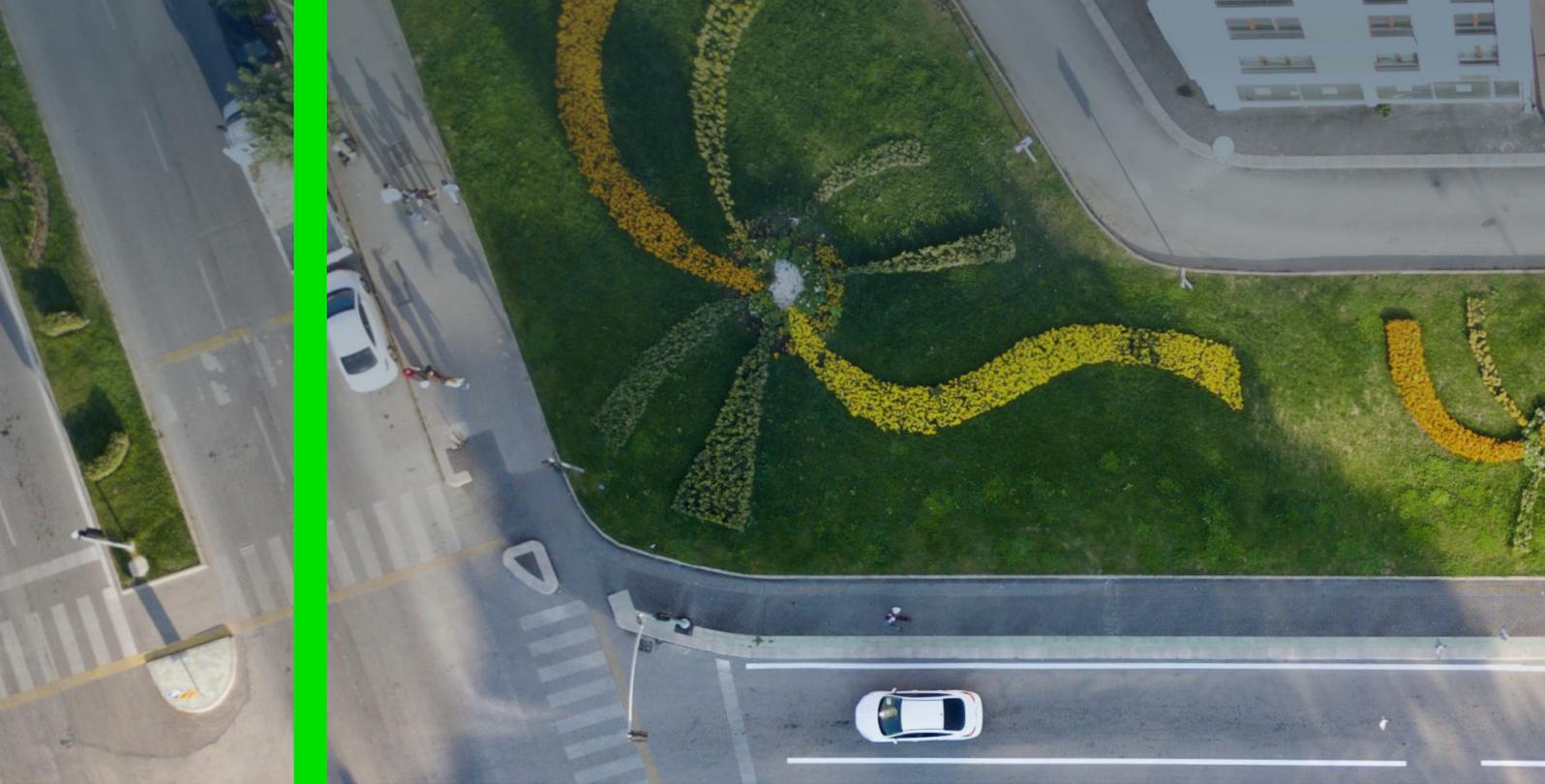




FCM

Watching our waste line

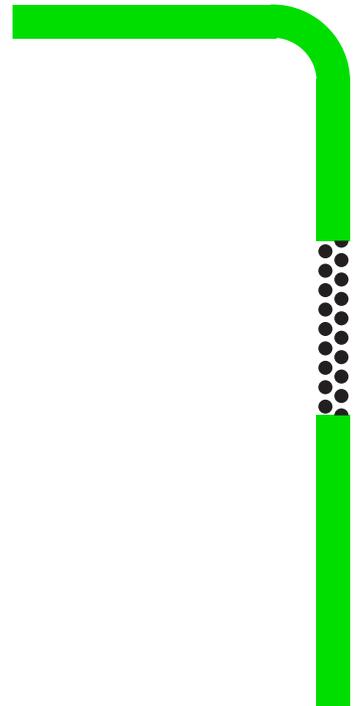
Sustainable Travel Series – Issue 4



Are you a conscientious corporate traveller?

FCM has produced a series of five in-depth reports on sustainability strategies in the hospitality industry, detailing carbon and energy conservation, water scarcity and pollution, waste reduction and community engagement.

The fourth report in our series looks at actions being taken to minimise waste, with best practice revolving around the three RR Rs: reduce, re-use and recycle, all geared to diverting from landfill and incineration.





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A growing waste line

Waste not, want not airports

Waste not, want not airlines

Waste not, want not hotels

A growing waste line

In the Pacific Ocean
there is a plastic island

twice the
size of
Texas

created by dumping
waste into the ocean

The mountains of waste that the world generates is a growing and iniquitous problem. Developing countries that have been dumping grounds for further treatment, disposal or recycling, have said loudly, "Enough". The Haitian government, for example, has now banned all waste imports. Sold to these countries as a route to economic expansion, the often hazardous and toxic waste from Western countries ends up crippling the economies in poorer, developing countries across Africa, Asia and Latin America.

The shortage of landfill sites has pushed the issue of waste reduction higher on the business agenda and it is an increasing concern to all stakeholders wanting to know how companies are managing waste.

Moreover, the growing demographic of millennials - very often women - are part of an increasing zero-waste movement who are embracing a minimalist lifestyle of buying less. The reasons for the growing volumes of waste are varied but centre around the

world's growing population, increasing urbanisation and a rise in living standards which correlates to a greater consumption of goods.

The World Bank Group estimates that annual waste generation will increase by 70% from 2016 levels at 2.01 billion tonnes - which is around 0.74 kilograms per person per day - to 3.40 billion tonnes in 2050.

While food and drink are the major waste items, an increasing number emanate from e-waste, those discarded electrical or electronic devices that appear to have built-in obsolescence. Leaks into local waterways and groundwater then cause exposure to deadly toxins for the local communities trying to earn a living from the often-unregulated waste dumps. Furthermore, when waste is burned openly the ash that forms pollutes with various hazardous gases. Poorly-managed waste not only decimates the health of the local community but also contributes to global climate change through methane generation.



The world generates at least 3.5 million tonnes of plastic and other solid waste a day, which is ten times the amount generated 100 years ago

SOURCE: World Bank

1.3 billion

The world's cities generate 1.3 billion tonnes of waste each year, and with the current urbanisation and population growth rate, global waste generation is estimated to rise to 2.2 billion tonnes by 2025

SOURCE: WWF

The Basel Convention international treaty came into effect in 1992 to stop 'toxic colonialism', to reduce the movements of hazardous waste between nations and specifically from developed to less developed countries. As of last year, 186 states and the European Union were parties to the Convention.

More recently, the UK introduced a new strategy to combat the UK's growing waste problem. Introduced last December, the plan is for businesses and manufacturers to pay the full cost of recycling or disposing of their packaging waste. In tandem, the government set up a pilot scheme to reduce food waste which involves redistributing food to people in need, including homeless shelters and food banks. Furthermore, there are plans to end confusion over household recycling.

Managing waste properly is essential for building sustainable living conditions but effective waste management is expensive and requires significant longterm effort.

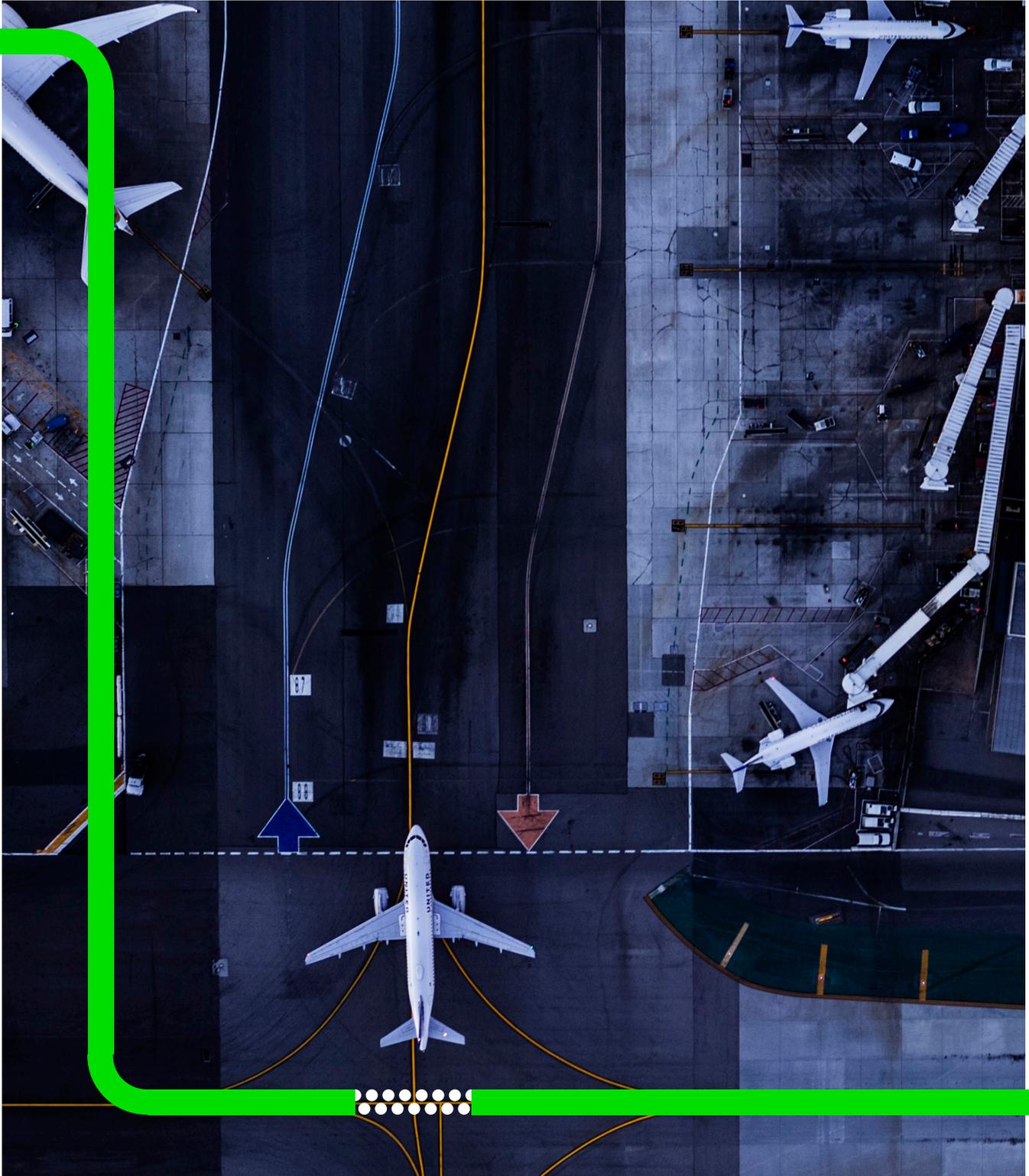
More recycling and less disposal is the way forward for countries and companies, with the well-used three RRRs - Reduce, Re-use and Recycle - as bywords. The EU recycled 55% of domestically generated waste in 2014 according to Eurostat, for example, with Belgium, the Netherlands, Slovenia, the Czech Republic, Italy, Latvia and Poland recycling over 60% each.

The three RRRs are uppermost in the strategies of many planet-friendly hotels, airlines and airports and in this white paper we detail their efforts in this crucial area.

Plastic bottles dumped into landfill will take thousands of years to decompose as they are not exposed to sunlight

SOURCE: WATERWISE.ORG.UK

Waste not, wa



ant not airports

Dubai International Airport is busy eliminating single-use plastics from all customer areas, and has teamed up with Disney Middle East in a bid to raise awareness of recycling and the need to eliminate single-use plastics.

Gatwick Airport set a 2020 target to reduce waste as part of its Decade of Change strategy launched in 2010, and to become the UK's most sustainable airport. It achieved a 64% re-use/recycle rate of all waste, which represents a 6% increase in 2018, with all empty coffee cups and plastics recycled and zero waste sent to landfill.

In the first three months of 2019 Gatwick averaged a recycling rate of 70%. The airport collects discarded materials from around 2,000 bins across the airport each day then sorts it at the airport's on-site recycling facility to maximise re-use, recycling and recovery of the materials. Paper, plastic and metal is baled by type and sent to UK processors for recycling and re-use in the UK; organic waste that cannot be recycled is dried out and turned into biomass fuel which is used to heat the Recycling Centre; ash from the boiler is re-used in low carbon concrete; other general waste is compacted and sent

offsite for energy recovery and turned into electricity for the grid.

Of all the 13,772 tonnes of waste collected in 2018, 25% was re-used, 39% was recycled and 36% recovered offsite to make electricity.

Heathrow Airport, under its Heathrow 2.0 strategy launched in 2017, has been busy on the sustainability front too and in terms of waste is striving to become a zero-carbon airport.

Some 47.7% of the airport's waste was recycled last year, up from 39.7% in 2017. It is working towards a target of 70% by 2020 and was helped in 2018 by a reduction in aircraft cabin waste with a new system to remove liquids from plastic bottles which enabled two million more plastic bottles to be recycled.

Around a quarter of Heathrow's waste comes from aircraft cabins and last year the airport managed to recycle 13% of cabin waste, which equates to around 900 tonnes, all of which was previously incinerated.

Dedicated recycling bins in the airport aim to improve the recycling of coffee

cups but as with the in-cabin cups and bottles. These should be emptied first before being binned so they can be recycled, as well as the cup being separated from the cap, something that the airport is yet to communicate successfully.

The average office worker uses over

500

paper cups per year

SOURCE: UNWATER.ORG

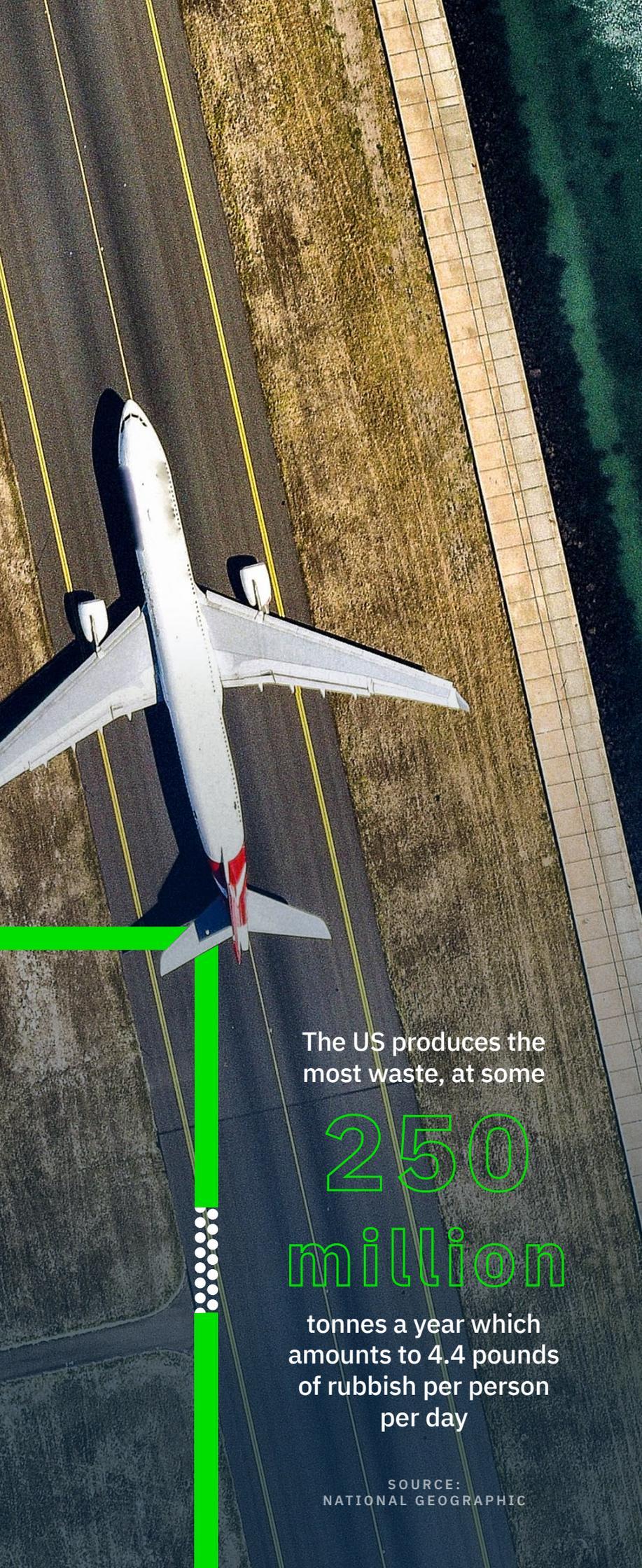
Waste not, want not airlines

Airlines are also busy on the waste front with multiple initiatives, despite being limited by regulations over recycling certain types of materials from international flights and carrying waste onboard for hygiene and storage reasons. Despite these challenges, airlines are pressing ahead.

American Airlines reduced waste both onboard and on the ground by banning the use of plastic straws. The US airline estimates that the replacement bamboo straws will eliminate 71,000 pounds of plastic each year. In addition, American Airlines' stations and maintenance facilities recycle various materials, including cardboard, plastic shrink-wrap, scrap metals, aircraft tyres, acrylic aircraft

windows, used oil and pallets. One particular innovation has been the recycling of the plastic rollers that hold the paper tickets inside the self-service ticket machines. After the stock is used the eight-inch plastic rollers are boxed up and returned to the ticket supplier for re-use. Last year, the airline returned over 20,000 rollers for re-use, avoiding 6.3 tons of waste.

Onboard, the airline generates about 400,000 pounds of aluminium cans each year as well as considerable amounts of plastic and paper. All are recycled with the proceeds going to The Wings Foundation which gives financial assistance for flight attendants due to illness or injury.



The US produces the most waste, at some

250 million

tonnes a year which amounts to 4.4 pounds of rubbish per person per day

SOURCE:
NATIONAL GEOGRAPHIC

Middle East carrier Emirates is committed to reducing single-use plastics on board and has come up with an innovative way of re-using plastic bottles: turning them into ecoTHREAD blankets for economy class cabin passengers. Introduced in 2017, the initiative has saved 88 million plastic bottles from landfill. Similarly, recycling other plastic bottles has diverted an estimated 3 tonnes of plastic bottles from landfill each month.

Etihad claims to have prevented over 50 kilograms of plastics from landfill on its Earth Day initiative on April 22nd this year, replacing all single-use plastic products used on-board with sustainable amenity kits, eco-thread blankets made from recycled plastic bottle, tablet toothpaste and edible coffee cups.

“We discovered that we could remove 27 million single-use plastic lids from our inflight service a year and, as a leading airline, it’s our responsibility to act on this, to challenge industry standards and work with suppliers who provide lower impact alternatives.” said Tony Douglas, Group Chief Executive Officer, Etihad Aviation Group. Etihad has pledged to reduce single-use plastic usage by 80% across the entire organisation by the end of 2022.

United Airlines is also striving to introduce more eco-friendly products and services alongside robust recycling and materials management schemes. In 2017, the airline recycled over 18 million pounds of cardboard, aluminium, plastic, paper and other materials. Flight attendants collect the waste in EcoSkies bags before it’s transported to the catering kitchens and then on to a material recovery facility.

At United’s recovery facility in Newark, for example, the waste is incinerated and converted to energy. In the airline’s ground operations and maintenance facilities, United recycles wood pallets, cardboard, plastic film, batteries and tyres. The airline partners with Clean the World to recycle unused amenity kit items and with organisations such as Good360 and Green Standards to find new homes for obsolete materials from its operations. United’s old banner ads are turned into upcycled travel bags.



Plastic bottles
dumped into landfill
will take years to
decompose as they
are not exposed to
sunlight.

LATAM joined the fray this summer with its Recycle your Journey global sustainability programme for all on-board food packaging waste such as aluminium, glass and plastic. The scheme is part of the airline's decade-old Together, More Sustainable sustainability strategy which has earned it a place in the Dow Jones Sustainability Index.

Between August and December this year the airline estimates that the initiative will recycle more than 20 tonnes of waste from domestic flights in Chile alone. The programme will then be rolled out across LATAM's entire network with the aim of recycling 100% of food packaging. By the end of 2020 LATAM expects to recycle more than 55 tonnes of on-board waste each year.

Cathay Pacific has embedded an "environmentally responsible mindset in our culture and sustainable practices in our operations" and vets all suppliers against its Supply Chain Sustainability Code of Conduct to procure sustainably sourced items. For example, the airline's napkins are made from 70% sugar cane and 30% wood pulp; its carpets from regenerated nylon waste materials such as discarded fishing nets; and blankets from recycled plastic bottles.

From this year all Cathay's new merchandise and collateral will have no single-use packaging. This will remove around 11,500 single-use plastic packaging on four product lines: water bottles, notebooks, passport holders and luggage tags. It has also revised its meal ordering process to reduce food waste.

Cathay has been sorting, re-using and recycling inflight waste since 2006 and last year the airline recycled 1,983 tonnes of paper and cardboard, 39 tonnes of metal, 467 tonnes of plastic.

463 tonnes of glass, recycled 31,964 litres of food processing oil and donated 434 tonnes of surplus food to charities.

The tree RRR's are also embedded in Virgin Atlantic's company ethos, with a multi-faceted sustainability strategy that adds a fourth R: recovery, for electricity or heat production when recycling is not possible. For example, cabin waste will be used to create energy for the airline's new Gatwick home at North Terminal. Virgin partners with MNH Sustainable Cabin Services – owned by a former airline employee – to recycle and re-use high volume waste, for example unused amenity kit items, blankets, headsets, old magazines and menus. Sponges from the headsets are used to surface an equestrian centre and plastics are turned into garden picnic benches. In 2016, over 1 million amenity kits were recycled and of those 55% were reassembled into new amenity kits. Virgin Atlantic flew its first commercial flight Orlando – UK last October with fuel made partly from industrial waste gas emissions.

Singapore Airlines is utilizing machine learning to better predict consumers* consumption patterns to reduce food waste on board, while Qantas operated its first ever commercial flight to produce no landfill waste in May this year. It is part of the Australian airline's plan to eliminate 75% of the airline's waste by end 2021.

About 1,000 single use plastic items were substituted with sustainable alternatives, such as meal containers made from sugar cane and cutlery fashioned out of cop starch, or removed altogether and then disposed of via compost, re-use or recycling.



Waste not, want not hotels

Food is one of the major culprits of waste as - along with drink - it accounts for a fifth of UK greenhouse gas emissions.



Hotels' 24/7 business model churns a significant amount of food waste as large purchasers of food and drink. Add to that the amounts of unnecessary plastic packaging covering guest slippers, toothbrushes, drinking glasses, laundry bags, sweet wrappers, gifts, incoming food supplies into the kitchen to protect from contamination etc and hotels have their hands full trying to find suitable replacements.]

Major hotel player IHG – InterContinental Hotels Group- was ranked first in the hotel industry on the 2017 S&P Dow Jones Sustainability World Index and it's no surprise that their efforts have been wide ranging. The company's Green Engage System is their group – wide online sustainability programme which manages the use of energy, carbon, water and waste across all of it's 4,700 hotels in 100 countries. Hotels can choose from over 200 green solutions designed to help them reduce resource usage and improve their impact on the environment. To ensure participation in the system, hotels have to reach a level of certification and undergo a third – party assurance process.

Each Hotel is encouraged to utilise a waste management plan which incorporates the three RRR's to divert as much waste from landfill as possible. IHG has measured all food waste in kitchens and the cost of disposing of it, and subsequently introduced more careful menu planning which has resulted in a reduction on average of 20% less food waste.

In the Americas region, the hotel group has introduced bulk – sized bathroom amenities in Holiday Inn Express,

Staybridge Suites and Candlewood Suites brand, Kimpton Hotels rolled them out two years ago.

In addition, unused soap and guest room amenities are recycled and IHG is on target to eradicate single-use plastic straws across its entire group by the end of this year. The company is also trialing carpet made from 100% recycled yarn. On a much smaller scale, Grange Hotels has long been committed to operating eco-friendly hotels and on the waste front it encourages re-use and recycling as well as the limiting of environmentally hazardous materials where alternatives are economically suitable.

NH Hotels is on a major drive this year to eliminate plastic cups, laundry bags, slipper packaging and sweet wrappers and replace with sustainable alternatives. It is already in the process of getting rid of the 1.1 million plastic straws used in the group's bars and restaurants which is part of an annual reduction of more than 13 million single-use plastic items. Waste reduction initiatives run company-wide including local initiatives, such as the Waste Reduction Weeks at its Italian properties and training workshops in the Netherlands to prevent food waste.

Accor's Planet 21 sustainable development programme has been running since 2012 and waste reduction is an integral part of it. It has a goal of reducing food waste by 30% by 2020 by following these 3 principles: Reduce (eg. Serving food little by little on the a buffet service, using anti-waste recipes and better stock configuration); Recover: (resale of food via Too Good To Go) and Recycle (via partners Suez and Veolia in France).

Reducing waste is one of the ways Marriott International wishes to reduce its environmental impact and is part of its overarching 2025 Sustainability & Social impact goals. By that date it has set a goal of reducing waste to landfill by 45%, and of food waste by 50% from its 6,500 properties in 127 countries. Its 2018 report highlighted that it had only begun the journey on 2017, by working to establish baseline and data methodologies.

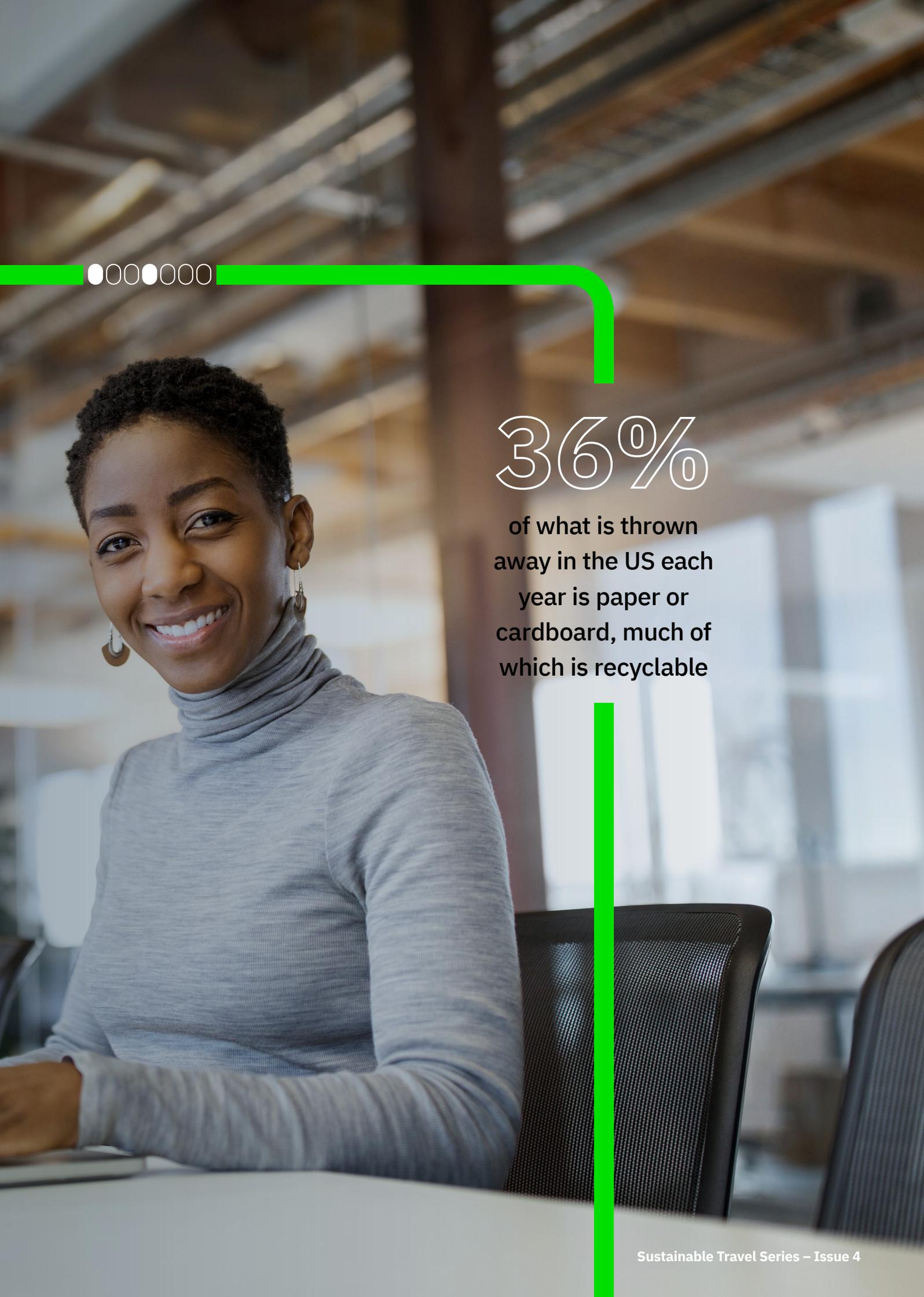
Hilton has set a goal of 2030, by which time it plans to cut environmental foot print in half. This includes reducing waste by 50% and removing plastic straws from managed properties and plastic water bottles from all meetings and event spaces in its European, Middle Eastern, African and Asia Pacific hotels. The company has already reduced its landfill waste by 41% since 2008.

It has found innovative ways to repurpose waste, for example soap for which it has the industry's largest recycling programme. Hilton

soap has been recycled into more than 9.6 million new soap bars distributed to people in need in 127 countries, representing over 2.4 million pounds of waste diverted from landfill. At the Hilton San Francisco for example, any viable food is donated to local shelters and agencies, and for food that cannot be rescued or donated it is composted, which saves the hotel approximately US\$7,000 per month in waste hauling fees. In October 2016, over 2,000 lunch boxes were donated to shelters and local agencies during the hotel's busiest conference.

Radisson Hotel Group's waste strategy revolves around increasing the amount of material that is recycled, tackling food waste and eliminating single-use plastics wherever possible. The group is trying to minimise food waste by implementing portion control, correct food storage and reducing food spoilage. Its Norwegian properties have signed up to an industry initiative to reduce food waste by 20% by 2020 and by 50% by 2030.

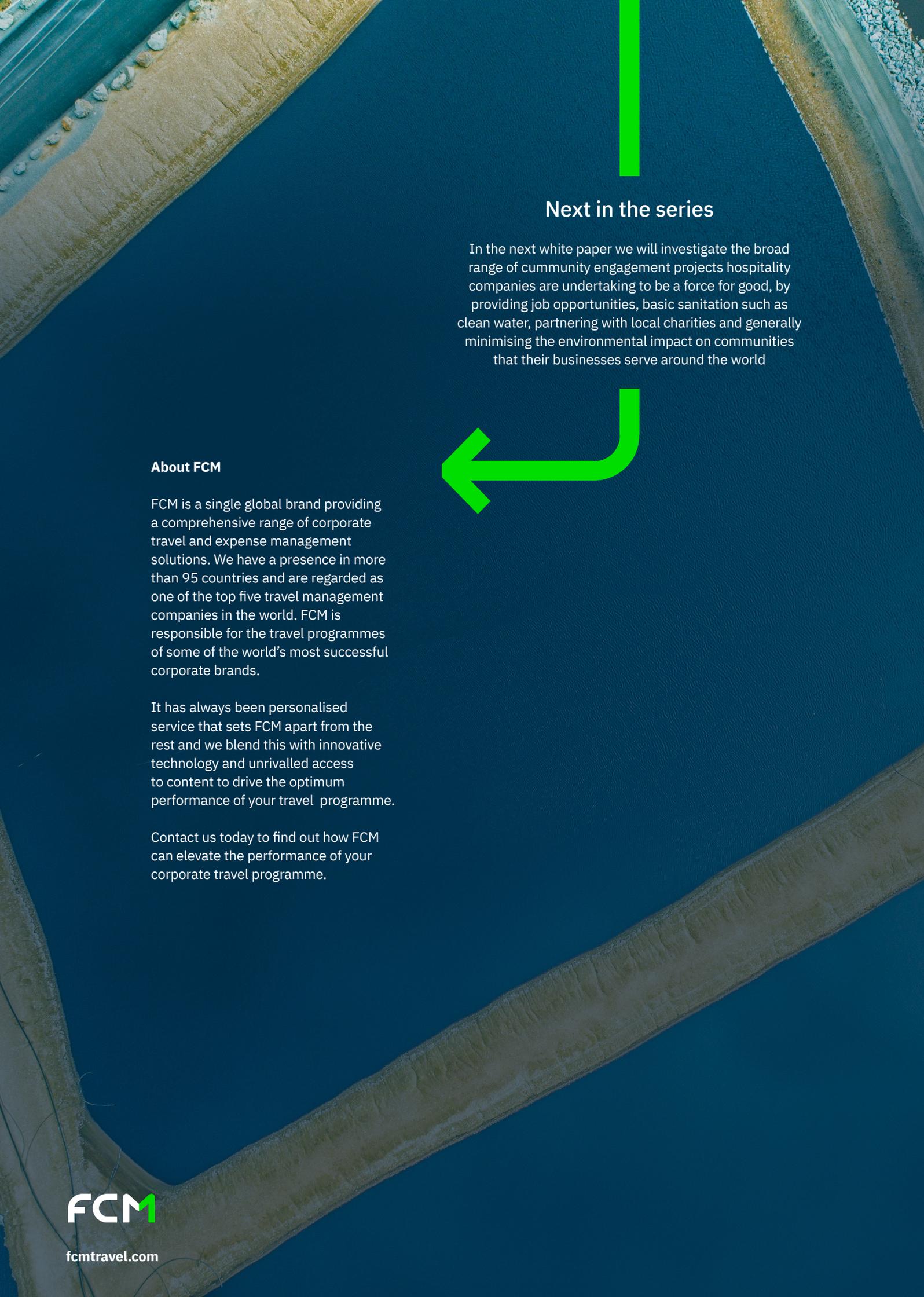




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36%

of what is thrown away in the US each year is paper or cardboard, much of which is recyclable



Next in the series

In the next white paper we will investigate the broad range of community engagement projects hospitality companies are undertaking to be a force for good, by providing job opportunities, basic sanitation such as clean water, partnering with local charities and generally minimising the environmental impact on communities that their businesses serve around the world

About FCM

FCM is a single global brand providing a comprehensive range of corporate travel and expense management solutions. We have a presence in more than 95 countries and are regarded as one of the top five travel management companies in the world. FCM is responsible for the travel programmes of some of the world's most successful corporate brands.

It has always been personalised service that sets FCM apart from the rest and we blend this with innovative technology and unrivalled access to content to drive the optimum performance of your travel programme.

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