

Change
is in the air !

virgin atlantic 

Sustainability report

Autumn 2012





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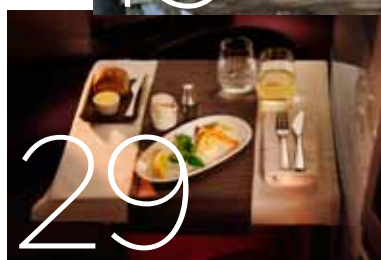
16



18



19



29



33

3 Introduction

7 **Environment**

7 Big picture

9 Aircraft fuel

16 Ground energy

18 Ground transport

19 Waste

28 Water

29 Sustainable design and buying

33 **Community investment**

34 Fundraising

36 FTC UK Schools Programme

38 FTC International Development projects

52 Other charitable support

53 **Appendix**

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Introduction

Message from the top

We're very proud to share with you this third Virgin Atlantic sustainability report – the next chapter in our on-going sustainability story. Last time we set the scene in the areas in which we're reducing the environmental impacts of our business, as well as engaging with local communities in some of the destinations we fly to.

This time, as well as reporting our annual data and overall progress, we'll also provide more detail on some great initiatives our colleagues have come up with as part of our sustainability drive. We're reporting a little earlier this year than we did last time, and in future plan to release our sustainability reports each summer/autumn period.

“Our vision is to be a leading airline on sustainability, driving solutions for our industry”

“For Virgin Atlantic sustainability is pretty simple. It's the way we do business – balancing our impact on the environment with the significant social and economic benefits aviation brings to the UK and worldwide. Our vision is to be a leading airline on sustainability, driving solutions for our industry. It's always a challenge, and we're not claiming to be there yet, but we are certainly leading the way.”

Steve Ridgway, Chief Executive



CEO Steve Ridgway speaking at the Green Aviation Symposium 2012.
[Download his presentation here.](#)

What is Change is in the Air?

Our 'Change is in the Air' (CIITA) sustainability programme covers two main work programmes: environment and community investment. CIITA primarily means using new technologies and fuels, and efficient operations and maintenance to make our aircraft more carbon efficient, but it also means other things too, like: engaging with others on the challenge of making our industry more sustainable; buying renewable energy for our ground operations; cutting down our ground energy use; making our ground vehicles more efficient; and reducing, reusing and recycling our waste.

It also means looking carefully at what we design and buy, getting our colleagues, suppliers and customers involved and engaging with communities in the UK and internationally. Sustainability is very much aligned with our company brand values, and we're pushing on with the process of embedding it firmly into the way we do business.



At Virgin Atlantic we believe that sustainability is part of everyone's job - from cabin crew to engineers, contact centre staff to spa therapists.

Governance & working together

"We're known as a company that cares about what we do and how we do it. Sustainability helps us direct that business ethos when making decisions and finding creative solutions to our environmental challenges while looking after our customers, staff and communities and operating a successful business. We're known for our innovation, and our adventurous spirit means we're not afraid to push boundaries in following our sustainability vision. We know that sustainability can sometimes offer us a genuine triple win – for example, achieving fuel, energy and carbon reductions, and reducing our use of materials, can save us money, but it also makes sound business sense and is simply the right thing to do."



Julie Southern, Chief Commercial Officer and Chair of the Virgin Atlantic Sustainability Strategy Group

Good governance – our Sustainability Strategy Group

Top-level management support, putting sustainability at the top of our company's agenda, has been key to this process. In 2011 we established a Sustainability Strategy Group (SSG) to focus on embedding sustainability right to the core of our day-to-day business. Chaired by our Chief Commercial Officer, Julie Southern, the group meets quarterly and brings together Directors and other senior managers from around the business. They've already collaborated to decide our renewed vision, strategy and key sustainability priorities going forwards. The Sustainability team provides strategic guidance to the SSG and helps set objectives with the leads from key business areas, who are responsible for driving, innovating and delivering sustainable practice in their areas.

Sustainability is a team effort – working with our colleagues

While we're very fortunate to have 'buy-in' right from the top, we also know it's vital that all our colleagues are 'onboard' with our sustainability journey. At Virgin Atlantic we believe sustainability is part of everyone's job – from cabin crew to engineers, contact centre staff to spa therapists.



Getting involved at our showcase: carrying a water gerry can from Sikirar, our partner community in Kenya

So we are doing all we can to engage and inspire them to effect meaningful change in their own area of work. We collaborate with teams around the business to keep them up to date on sustainability developments and hear about what they're doing. Sustainability stories appear regularly on our intranet and in staff newsletters; we encourage our colleagues to suggest what their teams can do to reduce environmental impacts. We recently held a 'Showcase' exhibition to enable our colleagues to meet some of the amazing people they've helped with their fundraising, and hear about the inspirational work we're involved in the UK and across the globe.

Sustainable business at Virgin Atlantic involves our colleagues being willing not only to embrace change, but to be an active part of it.



Our Free the children showcase gave our colleagues the opportunity to find out more about our sustainability work and meet some of the people their fundraising has helped like Mama Leah from our Free The Children partner community in Sikirar, Kenya, whose income has substantially increased by selling her beaded jewellery through our Retail Therapy magazine.



Our Showcase gave our colleagues the opportunity to find out more about our sustainability work and meet some of the people their fundraising has helped.

Sorted.

Paper, card, envelopes, plastics, sweet wrappers, yoghurt pots, plastic bottles, cans, shrink wrap, crisp packets, hot drink cups, drink lids, other clean plastics.

What a waste.

Everything thrown in this landfill bin goes straight into a useless hole in the ground, including stuff that could be recycled.

New signage in our offices means people are in no doubt about how to sort their waste.

So sustainable business at Virgin Atlantic involves our colleagues being willing not just to embrace change, but to be an active part of it. Many of our 'everyday pioneers' are doing just that. We hope this report will give you a taste of some of the great things they've achieved.



Virgin Atlantic's employee reward and recognition scheme 'Heroes' celebrates outstanding colleague contributions, including to our sustainability programme. In 2011 the Environmental Sustainability shortlist included:



- Our Head of Fuel Management, Jonathan Pardoe, for 'going the extra mile' to help in our quest to source a commercially viable low-carbon aviation fuel – ultimately resulting in our partnership with LanzaTech.
- Matt Neville, our Logistics Manager, was recognised for his great work in achieving significant carbon reductions across our ground transport fleet.
- And our Clubhouse Management team, as you'll read below, were congratulated for really picking up and running with the sustainability agenda – improving facilities, reducing waste and often getting their hands dirty.



On the left, Sally Barford, our Head of Uniforms, with Head of Sustainability, Emma Harvey

Sally Barford, our Head of Uniforms, won the overall Environment Heroes award for her initiative and determination in driving sustainability through our uniforms process – more on this later.

Our 2011 Community Investment Sustainability nominees were Paula Lipscomb from our Heathrow Clubhouse, cabin crew member Tracey Wheeler and overall winner, Flight Safety Manager Rob Holliday. Between them they've tirelessly raised money for our charity partner Free The Children by climbing Mount Kenya, completing the London to Brighton bike ride and our 'Cycle India' challenge, as well as running the London 10k and four marathons.



Rob Holliday, our 2011 Community Investment Hero, on his wheelchair bike speaking to a group of boys about his 260 km journey to Udawad, India

Environment

An airline like ours can make a difference in its own right, but it can make an even bigger difference by also encouraging the industry to work together in key areas.

Big picture: working with others

Collaborative, cross-industry work

We helped to set up a number of active industry groups such as Sustainable Aviation www.sustainableaviation.co.uk, Sustainable Aviation Fuel Users Group www.safug.org and Aviation Global Deal www.agdgroup.org. Do take a look at the websites to find out more about these unique alliances.

Since our last report there have been a couple of notable developments in these groups:

Sustainable Aviation



Sustainable Aviation (SA) brings together UK airlines, airports, engine and airframe manufacturers and air traffic management to find industry solutions to the aviation sustainability challenge through the cooperation and collaboration of all parts of the industry.

In March 2012, SA published a 'CO₂ roadmap 2012' explaining how UK aviation is able to accommodate growth to 2050 without a substantial increase in absolute CO₂ emissions. It sets out future projections for CO₂ emissions from UK-departing flights, and the contributions of new technologies, fuels, and operational best practices. The report makes interesting reading. Check it out [here](#).

Sustainable aviation fuels



In 2008, we got the biofuel-ball rolling with the first demo flight in the industry. Since then, we've been doing a lot of work on supporting the development of robust sustainability standards for our sector.

We're a founding member of the Sustainable Aviation Fuel Users Group (member airlines from around the world now represent 32% of commercial airline fuel demand). Through SAFUG we also support the Roundtable on Sustainable Biofuels (RSB) – an initiative that brings together companies, farmers, non-governmental organisations, experts, governments and inter-governmental agencies concerned with ensuring the sustainability of biofuels production and processing. RSB is the leading biofuels sustainability standard and it's what we ask our potential sustainable fuel suppliers to sign up to. See www.safug.org and rsb.epfl.ch for more information.



We're also continuing to partner with the Carbon War Room on their 'Operation Renewable Jet Fuels' to focus on finding solutions for scaling up sustainable jet fuel supplies to commercial levels. Take a look at carbonwarroom.com and renewablejetfuels.org for more information.

The International Civil Aviation Organization (ICAO) is a UN standards-setting body that pursues strategic consensus-building in many air transport areas, including environmental protection.



Campaigning for a global carbon cap and trade system for aviation

➔ **AviationGlobalDealGroup**

As of 1 January 2012, aviation is included in the European Union Emission Trading System (EU ETS). While we've always been a supporter of the EU ETS, because of the global nature of the industry, we believe a global carbon trading system would be most effective, hence why we were a founding member of Aviation Global Deal (www.agdgroup.org) and continue to campaign through this group for a global solution.

The International Civil Aviation Organisation (ICAO) is currently reviewing the options for global market based measures, which include:

- A global mandatory offsetting scheme;
- A global mandatory offsetting scheme with additional revenue-raising;
- A global emissions cap and trade scheme.

These options are being developed for review by the ICAO Council with a view to having draft proposals by late 2012 / early 2013, and agreeing on one of the options at the next ICAO Assembly of member states in autumn 2013.

As you'll read later, we're also active, together with industry peers, in campaigning for more efficient air traffic management systems such as the Single European Sky.

Aircraft noise

We're aware how important the issue of aircraft noise is and the current Virgin Atlantic fleet is compliant with the relevant ICAO noise standards. Over the next year we'll be working on a project investigating, with other stakeholders, how the industry will continue to address noise impacts, ranging from buying more efficient fleet to further implementation of operational procedures. We'll report more on that next time.



Our target is to reduce CO₂ emissions by 30% per RTK between 2007 and 2020

Aircraft fuel

We believe flying is crucial to the UK and global economy – contributing almost £50bn to UK GDP¹ and supporting 56.6 million jobs worldwide², as well as for connecting families, communities and businesses around the world. Virgin Atlantic alone contributes £1 billion worth of ‘exports’ to the UK economy. We’re also conscious that with socio-economic benefits come serious environmental responsibilities, which we are very focused on as a business.

Over 99% of our Scope 1 and 2 carbon emissions³ come from our aircraft, so most of our human energy is focused on reductions by improving our fuel efficiency. In 2007 we set ourselves a target of reducing carbon emissions, from every kilometre we fly passengers and cargo, by 30% between 2007 and 2020 (known in the business as revenue tonne kilometres, or RTKs).

Our new aircraft – some already in service and others eagerly awaited – will offer significant fuel savings. Efficient operation and maintenance of all our planes, plus careful route planning, are also key. And we’re retro-fitting new technologies on our existing fleet, to make our aircraft as fuel-efficient as possible.



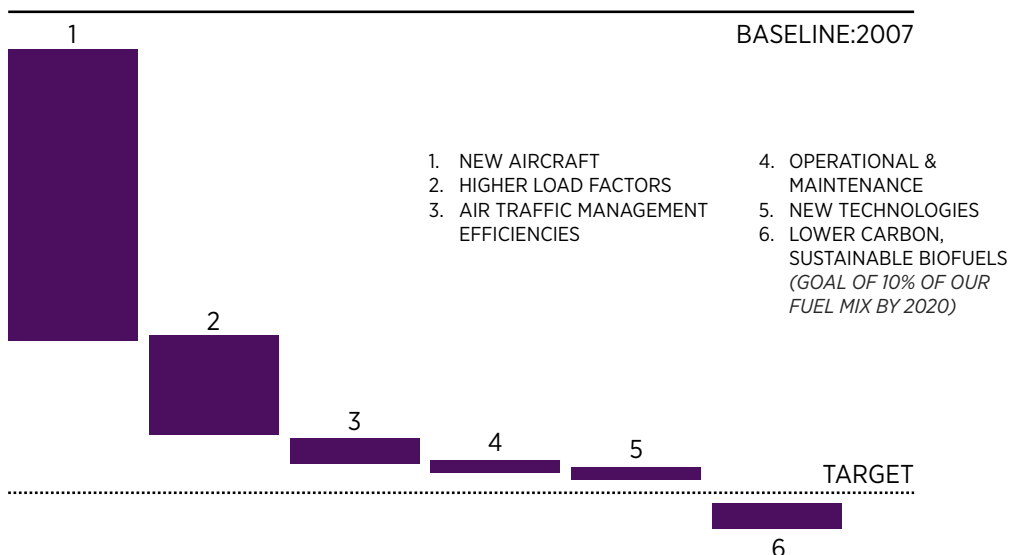
Our new aircraft will offer significant fuel and carbon savings



Our partnership with LanzaTech will offer us a commercially viable, low carbon and sustainable alternative to kerosene jet fuel

We’re also very excited about the potential for significant carbon reductions offered by sustainable jet fuels of the future, particularly through our partnership with low carbon fuel company LanzaTech (explained in more detail below).

What will contribute to the 30%? And how much?



¹ Oxford Economics, Economic benefits from air transport in the UK, 2011, p.4

² ATAG Aviation Benefits Beyond Borders 2012 Report

³ Scope 1 are direct emissions for example from company owned/operated aircraft, vehicles, generators and boilers. Scope 2 are indirect emissions, for example from purchased electricity.



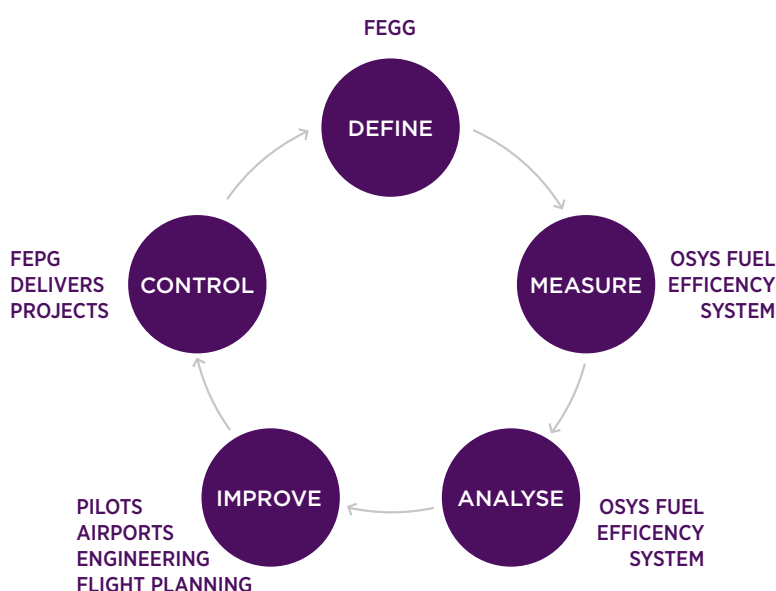
Fuel efficiency management

As we said earlier, over 99% of our carbon footprint comes from the fuel we use to power our planes, so super efficiency is the name of the game. We take a very detailed and strategic approach to the way we manage and monitor our fuel usage.

Our Fuel Efficiency Governance Group (FEGG) brings together a small and focused group of key Directors and managers, to review our fuel performance, define our fuel efficiency programme overall and strategically identify key priorities.

Our Fuel Efficiency Performance Group (FEPG) is responsible for delivering the programme of fuel saving initiatives identified by the FEGG. It has a wider membership from a number of our business areas – from Engineering and Operations to Customer Experience.

Both groups are informed by our new OSyS Fuel Efficiency System, which allows us to accurately monitor and review our fuel usage around the world.



Aircraft emissions account for 99.7% of our Scope 1 and 2 carbon footprint

So how are we getting on?

In 2011 our carbon footprint from our Scope 1 and 2 emissions was 4.629 million tonnes CO₂.

Figure 1 shows that aircraft emissions accounted for 4.617 million tonnes (99.7%) of this.

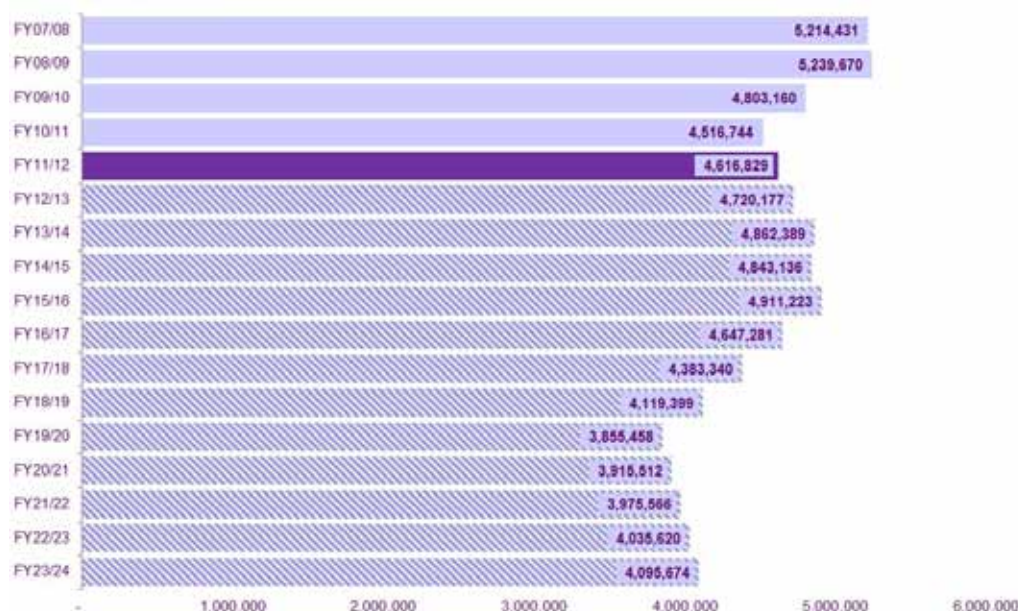


Figure 1: Virgin Atlantic total aircraft CO₂ emissions (tonnes), current and projected

The aviation industry-wide target is for carbon-neutral growth by 2020. Whilst Virgin Atlantic's business is growing, our calculations, set out in Figure 1 (based on the measures we're taking, described below) project that our total aircraft carbon emissions will peak and start to reduce from 2015/2016, with a moderate amount of subsequent growth.

Figure 2 shows our current and projected performance according to our efficiency target of CO₂ per RTK.

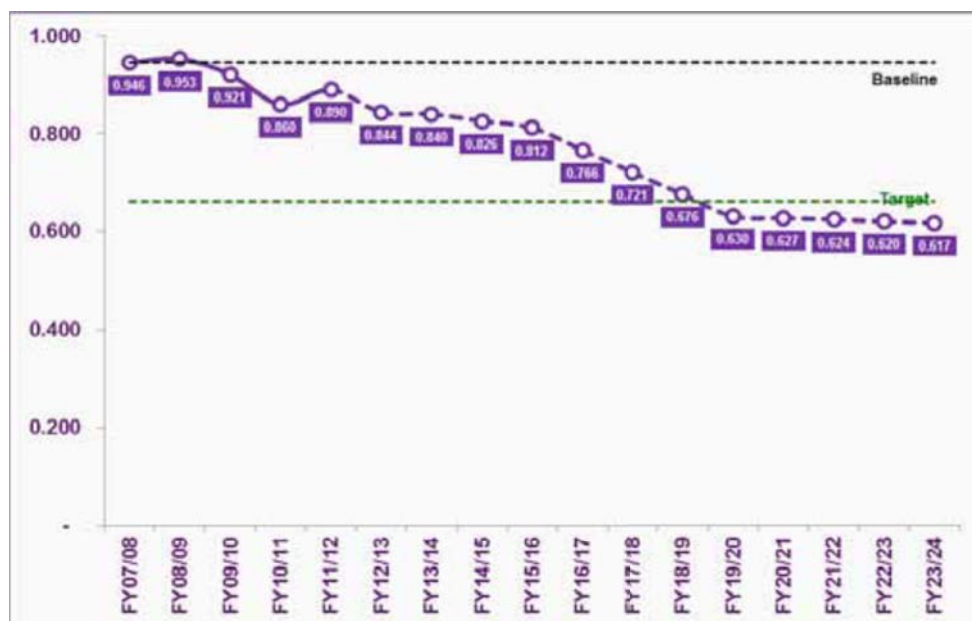


Figure 2: Virgin Atlantic kg CO₂ per RTK, current and projected performance against target

In this report, we've also presented our data to show the grams of CO₂ emitted for every passenger, for every kilometre flown (g/CO₂ per pax km): see Figure 3.

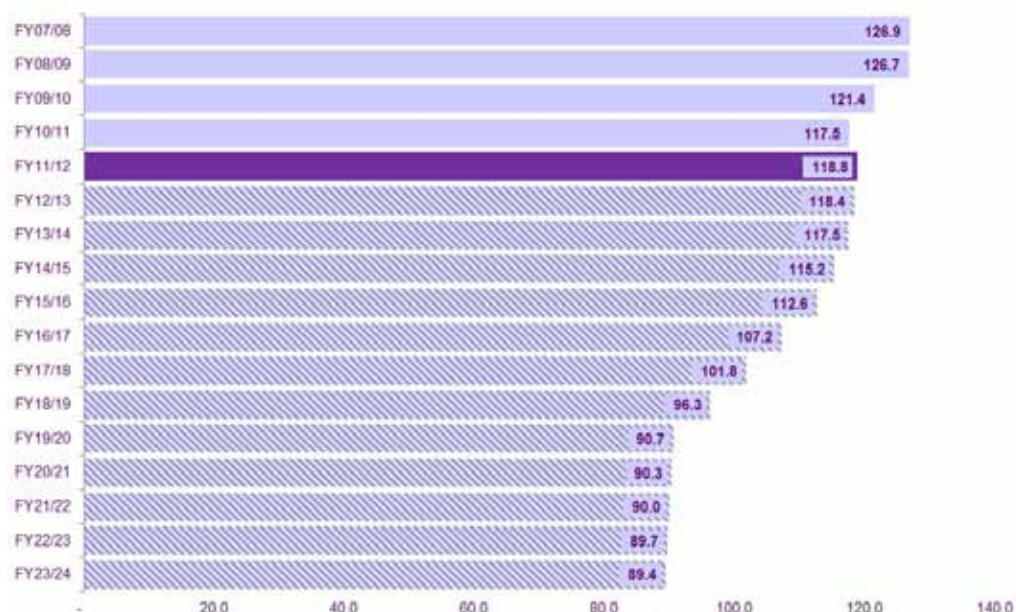


Figure 3: Virgin Atlantic grams of CO₂ per passenger kilometre

In the financial year to February 2012 this was 118.8g CO₂ per pax km, and again this is expected to reduce over time.

The reductions we've already achieved are the result of consistent hard work by many teams across our business – Commercial, Operations, Engineering, Design and In-Flight Services to name but a few. We also have more plans for the coming year to drive down our emissions even further. Here's a snapshot of what we've been doing, and a taster of what's in the pipeline...

What's done?

New aircraft

Our first four of the 10 new A330-300 aircraft we're introducing to our fleet – Mademoiselle Rouge, Beauty Queen, Uptown Girl and Miss Sunshine – now in operation, are 9% per trip and 15% more efficient on a per-seat basis than the models they've replaced.

What's next?

We have a rolling programme of replacing older aircraft with newer, more efficient models. We're expecting delivery of another six A330-300s and hope to welcome the first of our 16 Boeing 787 'Dreamliners' into our fleet in 2014. They'll be around 25% more efficient per trip and 27% more efficient on a per seat basis than similar sized aircraft in our fleet. New generation fuel-efficient aircraft are pushing the 100g CO₂/passenger km barrier, comparable to the emissions of a single-occupancy city car.

Load factors

It's good business to maximise load factors across our three cabins – Economy, Premium Economy and Upper Class. The recent economic downturn has impacted our load factors, which dipped a little in the financial year to February 2012, averaging at 77.8%.

We'll continue our focus on maximising our load factors – particularly ensuring we use the right aircraft with the most appropriate cabin configurations for each route. On that note, the new Upper Class section in our A330 aircraft has an extra three seats thanks to clever design, which will also help to improve our efficiency.

What's done?

Air Traffic Management (ATM) Efficiencies

In 2011 our Chief Executive Steve Ridgway was the Chairman of the Association of European Airlines. A big focus over that year was lobbying for the urgent implementation of the Single European Sky (SES) – an integrated, Europe-wide ATM system: www.eurocontrol.int/dossiers/single-european-sky.

Rather than having to 'zigzag' through different airspaces, we and other airlines could fly in straight lines, like birds. This would be more cost-effective, reduce passenger travel times and most importantly deliver a potential 15-20% fuel saving⁴ – reducing all airlines' CO₂ emissions by a total 12 million tonnes in Europe.

What's next?

UK air traffic control service provider NATS has set an overall target of a 10% carbon reduction per flight by 2020. We'll continue to press for better, more streamlined international ATM systems such as SES. In the USA, the Next Generation Air Transportation System (NextGen) will also offer benefits through enhanced ATM procedures.

We've also been involved, together with industry partners, in developing the new Departures and Ground Operations Code of Practice to be implemented by Sustainable Aviation. This includes recommendations that Air Navigation Service Providers should focus on opportunities to implement take-off on a continuous climb, and that Airport Collaborative Decision Making should be introduced at all major UK airports.

Operations and maintenance

As well as looking good, clean aircraft are aerodynamic, with less 'drag' or friction as they cut through the air. So they burn less fuel and emit less carbon into the atmosphere. Cleaning initiatives we've introduced over the past year include polishing the 'leading edge' of the wings on our aircraft to ensure they're dirt-free. We also use the EcoPower pressure-washing system on all our engines to make sure they're free of grime or contaminants and run as fuel-efficiently as possible. Our aircraft cleaning is tracked on a weekly dashboard to make sure it's all on track. We calculate that using this system saved 5,797 tonnes of fuel or 18,260 tonnes of CO₂ in 2011.

Our new OSys Fuel Efficiency System went live in July 2012. This sophisticated piece of software will enable us to build on our existing fuel efficiency initiatives to accurately measure performance and identify and prioritise opportunities for further fuel and carbon savings. It will collect 300 parameters per flight in an easy-to-use, single source to enable our operational and flying teams to drive decision making and increase efficiencies, in areas such as how arrival delays and holding patterns are affecting fuel usage; pilot technique and fuel use on the ground. We estimate that this new fuel management tool could help us save as much as £20 million and 92,000 tonnes of CO₂ a year.

We'll be exploring further opportunities such as taxiing from runways with a reduced number of engines, minimising unnecessary use of auxiliary power units (APUs), and optimising the amount of water we load for each flight to avoid carrying extra weight unnecessarily.

New technologies for current fleet

We maintain our engines to the highest standard to support fuel efficiency and the reduction of carbon emissions. For example, we have a rolling programme of carrying out efficiency modifications to the Rolls Royce T500 engines fitted to our ten A346 aircraft, which is now 80% completed. 60% of our GE CF6-80 engines (fitted to our B744 aircraft) have now been through a blade replacement programme. These modifications offer specific fuel consumption improvements of 1% and 0.25% respectively. Our new OSys Fuel Efficiency System (see above) will enable us to closely track and monitor our fuel use going forwards, meaning that we will be able to report in detail on the fuel and carbon savings resulting from this and other fuel saving modifications and initiatives in the future.

We'll continue to explore ways in which our existing fleet can be made as fuel-efficient as we can, fitting new technologies and making fuel-saving modifications where possible.

Sustainable fuels

In October 2011 we were delighted to announce a world-first, low-carbon aviation fuel, to be delivered in partnership with exciting new fuels company, LanzaTech. Richard Branson described the process of converting steel waste gases to produce a fuel with roughly half the total lifecycle carbon content of kerosene, as "one of the most exciting developments of our lifetime and a major breakthrough in the war on carbon". The new fuel will be sustainable environmentally (it has lower lifecycle carbon emissions and won't cause deforestation), socially (it won't compete with staple food crops) and economically (crucially it will be available in viable quantities and at a comparable price to conventional jet fuel).

We're working hard to see the technology through to commercial use in our aircraft. We hope to have a demo flight using the new fuel in 2013, working with partners on the technical fuel approval (ASTM) process, as well as collaborating with the Roundtable on Sustainable Biofuels (RSB) on sustainability certification. We plan to uplift fuel in commercial quantities by 2014.

For further details, see our previous Sustainability Report Winter 2011/2012.

⁴ ATAG/Oxford Economics 'Aviation Benefits Beyond Borders' 2012 report: www.aviationbenefitsbeyondborders.org/download-abbb-report

Losing weight

Facts:

The lighter airframe, monuments, seats and galleys in our new A330s gave an overall weight saving of 1.3 tonnes per aircraft.

We've changed some of the materials used in our meal services to more sustainable alternatives.

Our new in-flight meal services have delivered an average weight saving of 129kg per aircraft.

The weight of our planes – and what's onboard – has a direct impact on our fuel burn and hence our carbon emissions. So from designing new aircraft interiors, to ensuring exactly the right amount of equipment is loaded on our flights, to using plastic bottles to serve our wine instead of glass, we're watching our weight.



One of our new A330 aircraft with lighter interiors

For example, when we recently fitted the interiors of the first of our new A330s, the lighter airframe, monuments, seats and galleys allowed us to deliver an overall weight saving of 1.3 tonnes per aircraft. We've also successfully reduced the amount (and therefore

weight) of potable water we carry on our aircraft by 25%, without compromising on passenger comfort or safety.

We've also been busy looking at clever design, more sustainable materials and improved lifecycle of the products used to serve our in-flight meal services. It's a win-win for us and the environment as using fewer materials means less weight, less fuel burned, and less CO₂ emitted. For example, we've reduced the weight of our meal trays, containers, chinaware, glassware and cutlery – even the humble teaspoon hasn't been overlooked.



With the help of specialist agency Giraffe we've also changed some of the materials to more sustainable equivalents. For example – and here's the science bit – some of the lids for passengers' meal dishes have been changed from PET (PolyEthylene Terephthalate) to recycled PET, and the acrylic tray changed from acrylic to ABS (Acrylonitrile butadiene styrene), which are respectively about 65% and 46% more greenhouse gas efficient than those they replaced.

Combined, the new in-flight meal services have delivered an average weight saving of 129kg per aircraft. This equates to a potential fuel saving of 762 tonnes (2,400 tonnes of CO₂) a year.



Our new inflight meals are served on lighter, more sustainable dishes

All these weight and carbon savings were delivered as part of our new Economy and Upper Class meal services (including our welcome cocktail and afternoon tea trolley), which as well as reducing our environmental impact, provide our passengers with an enhanced onboard meal experience.

What passengers can do to help: carbon offsetting



As an airline, we're focused on cutting our carbon emissions and demand for fuel by buying new, more efficient aircraft and other measures such as higher load factors and improved operations and maintenance. However, we also think it's important to offer our passengers the opportunity to offset the emissions associated

with their flights in a meaningful way – by supporting projects that achieve real reductions in greenhouse gas emissions and provide significant benefits for the communities involved.

Standards in the voluntary carbon market have come on leaps and bounds in the last few years and we've chosen the 'crème de la crème' for our carbon offset projects – Gold Standard certification. It's supported by over 80 non-governmental organisations (NGOs) around the globe and endorsed by the International Carbon Reduction and Offset Alliance.

To ensure our passengers offset the amount of CO₂ equivalent to their specific flight, we've calculated the exact emissions for each of our planes, on each route, and had this independently verified.



Our offset scheme is provided by non-profit foundation, myclimate (www.myclimate.org), which guarantees that at least 85% of the money paid to the scheme goes direct to the projects themselves. In 2011 the offsetting funds were used in the myclimate Gold Standard Portfolio, which includes a project in Karnataka, India, that uses agricultural waste as a fuel source for a local power plant, and another in Kakamega Forest in Western Kenya which distributes efficient cook stoves to rural households.



One of the projects our offsetting scheme supports: the new efficient Upesi stove used in Kenya saves 35-50% firewood and burns it more cleanly.

In September 2011, our carbon offsetting scheme was ranked 1st globally in an IATA-backed study of airline carbon offset services. But we're not resting on our laurels; we're always looking at ways to improve our scheme to make it as relevant and appealing to our passengers as possible.

Passengers can take advantage of our carbon offset facility when they book, or at any time online, as well as onboard. To find out more **click here**.

Our targets are to reduce ground energy use by 10% by 2012 and 20% by 2021.

Ground energy

Although most of our carbon emissions come from flying our aircraft, we also have fairly significant ground-based facilities, with properties including offices, training centres, hangars, warehouses and lounges. We manage some ourselves, others are controlled by airport authorities and commercial landlords. Virgin Atlantic has around 8,500 employees and most of them are UK-based – around half are pilots and cabin crew and the other half are ground-based – so we focus our attention here. Our major office facilities are our headquarters ‘The Office’ and our training centre across the road ‘The Base’.



Our HQ, The Office.

Ground energy use

Our targets here are to reduce ground energy use by 10% by 2012 and 20% by 2021. We adopt the same reporting year as the CRC Energy Efficiency Scheme (CRC), with a baseline year of 1 April 2008 to 31 March 2009.

How are we getting on?

The data in **Table 1** in the Appendix shows a reduction across all our sites of 10.85% since our 2008/2009 base year, so we’ve exceeded the first of our ground energy targets.

What have we been doing?

This year we’ve seen the light

A big focus over the last year has been managing the lighting in our ground premises. When we can, we use more efficient alternatives when changing a lighting design or replacing a fitting. At our Head Office we’ve taken out over 450 unnecessary light fittings, whilst maintaining a bright and comfortable working environment. We’ve sourced more energy-efficient alternatives to light other spaces such as our reception areas, lift lobbies and corridors; 138 lights have been replaced by an LED fitting, using 95% less energy than the original.





Stylish – but low-energy – lighting in our Heathrow Clubhouse

One of the most difficult areas to light is our aircraft hangars. Our engineers need good all-level lighting to work with precision on our planes in these large open-plan spaces. We're currently trialling a number of alternative LED light fittings in our London Gatwick hangar. Each one could replace two of our current fittings and offer a massive 89% reduction in energy consumption. We're also conserving energy by turning off internal gas heating automatically when the hangar doors are open.



We're conserving energy in our hangars

Our targets are to reduce ground energy use by 10% by 2012 and 20% by 2021

We've just finished installing 16 inverters in the heating and cooling systems at The Office and two at The Base. Inverters allow us to control the speed of the heating and cooling fans and pumps. Slowing them down (instead of running them flat out) improves efficiency, reduces energy consumption and extends the life of the motor and fan bearings.

Our IT department have also been hard at work to make our equipment and processes more energy efficient. For example, we have a rolling programme of refreshing and replacing old desktop computers and monitors with more energy efficient models. We're also migrating from physical to virtual servers and have a programme of installing next generation Energy Star compliant server hardware which is around 30% more energy-efficient than non-compliant hardware. This means we can also install less hardware overall, reducing the need for cooling – reducing energy.

We carefully monitor our building management systems and lighting controls to reflect user need, and take energy efficiency performance into account when purchasing new appliances and equipment. This has all contributed to an impressive 19% reduction in energy use at The Base since our 2008/2009 base year. At The Office we've reduced our energy use by 13% in the last year. And across all our sites, our energy use has reduced by 10.85% since our 2008/2009 base year.

What's next?

We're currently fitting automated meter readers in a number of our buildings to help monitor our energy use. We're also working with external advisors to explore the business case for further initiatives to offer significant energy reductions at our top four UK sites.

Ground transport

Ground fleet



One of our new, more fuel-efficient Virgin Atlantic ground vehicles

Last year, we started picking up the keys to a new set of cars and commercial vehicles and now operate VW UP, Polo, Golf, Touran & Passat cars and Citroen Berlingo, Dispatch & Relay vans. This change will see our average emissions per vehicle fall from 161gCO₂/km to 117gCO₂/km for our cars (a 27% reduction) and from 232g CO₂/km to 184g/CO₂/km for our light commercial vehicles (a 21% reduction) since 2009. Our provider Lex Autolease, one of the UK's leading fleet management companies, has reported that our chosen fleet is "way below average" in terms of CO₂ emissions. We're now about three-quarters of the way through upgrading our fleet. Our people are much happier with their new cars too, especially as instead of providing everyone with a large car, we match its size (from a small city car to an estate) to their needs.

Staff travel

We have all sorts of incentives to encourage our colleagues to take a more sustainable route to work. One scheme – the 'travel green easitNETWORK' – gives those based at our head office in Crawley, for the grand membership fee of 20p, access to loan bikes free of charge, including some new, funky electric ones. We also negotiate discounts on buses and trains for those coming from further afield.

For our Crawley-based colleagues, we have a discount scheme with local bus company Metrobus, to enable those commuting on public transport through Gatwick Airport to complete their journey to the office by public bus.



We've reduced our waste overall by 29% since 2008 and we're recycling 68% of our total waste.

Waste

Whilst Virgin Atlantic's biggest sustainability focus will always be reducing carbon emissions from our aircraft operations, we've also been making big inroads into reducing the amount of waste we send to landfill. Our first priority is to cut down on the overall amount of waste we generate; to creatively re-use and recycle as much as we can of what's left; and to avoid the use of landfill sites wherever we can.



Recycling our amenity kits

We produce some weird and wonderful waste and so need to deal with it both innovatively and responsibly. On the ground, we're able to take control of our waste management processes and achieve some great results. It's more difficult with aircraft waste as legally, there are many tonnes of waste we're not permitted to recycle (more on that later) – and in some of our destinations, recycling and other sustainable waste

disposal systems aren't available yet, but we're doing all we can to improve things.

On the ground...

As you'll see from **Table 2** in the Appendix, in 2011, we produced 741 tonnes of waste, down 29% from our 2008 levels. However, recently refurbishing our HQ The Office, as well as refreshing our IT equipment, has increased the overall amount of waste we've produced and so unfortunately we're not going to achieve our planned 50% reduction by the end of 2012. We've therefore revised this target, to be achieved by the end of 2015.

There's better news on the recycling front. By the end of 2011 we were recycling a whopping 68% of our waste. So we're on track to meet our target to recycle or reuse (or otherwise divert from landfill) 75% of waste generated by Virgin Atlantic-managed UK sites by 31 December 2012.

We are currently setting targets beyond the end of 2012, and will report on these next time around.

What have we been doing?

Reduce

We're still working hard to reduce the amount of waste we produce in the first place, from the big to the small. For example, even our toilet rolls have changed to coreless.



We estimate that we've saved nearly 86,000 toilet roll cores per year. If we'd stacked them on top of each other since we made the switch in August 2010, by now they'd reach far above our planes' cruising altitude.



A discount is given for using a re-usable mug in our staff restaurants.



We're cutting down on the waste paper we generate, and recycling what's left.

We're continuing to take steps to reduce the amount of paper we and our suppliers generate. For example, in summer 2011 we introduced a business-wide 'e-invoicing' system, focusing on 750 of our suppliers. So far 38% have implemented the system. Instead of producing a paper invoice, they now submit their invoices as electronic data, via a third party service provider. Once all the suppliers have made the switch, the new system will save about 66,000 individual pieces of paper, which equates to 132 reams or 24 trees.

Our central stationery pool gathers up and re-distributes unwanted stationery items around the business, to make sure nothing goes to waste. Last year 2,071 items were re-used. We've also set a target to ensure that 10% of stationery items are recycled internally by December 2014.



Re-use

In our recent office refurbishment and 'refresh' programme we placed a strong emphasis on reusing and recycling furniture, doors and partitioning, with almost zero waste going to landfill. Other 'old' furniture has been saved to be re-distributed around the company when required. We also sell old furniture to staff; raising funds for our charity partner Free The Children - a total of £1,390 in 2011.



We also collect gym kits and trainers from our staff - an estimated 70 sets in 2011 which we took to Kenya for athletics workshops in our Free The Children link community, Sikirar. Young people there trained for the Nairobi marathon, which they then ran together with some of our colleagues.



In 2011 we recycled 506 tonnes of our waste – the equivalent weight of over 5,000 of our passengers and their luggage.

Recycle

In October 2010 we launched our Less to landfill campaign at our Head Office in Crawley and we've been keeping up the good work ever since, as well as engaging our people through updated, engaging signage helping them understand how to segregate their waste. As **Table 2** in the Appendix shows, in 2011 we recycled a total of 506 tonnes – the equivalent weight of over 5,000 of our passengers and their luggage. That included 57 tonnes of furniture and aircraft seat foam, 26 tonnes of carpets and 12 tonnes of electrical goods.

Energy from waste

All food waste from our HQ The Office, training centre The Base, London Heathrow hangar and Virgin Holidays' HQ The Galleria, is converted into energy. In 2011 we diverted almost 30 tonnes of food waste from landfill – over twice our 2010 total

saving almost 17 tonnes of greenhouse gas emissions. It goes to a combined heat and power plant, producing enough electricity to power 128 40W bulbs for 8 hours every day for a whole year.



What's left?

In 2011 we also composted 14 tonnes of green waste.



Uniforms

We're very proud of the stylish uniforms worn by our flying crew as well as the people who represent us on the ground. As you'll read later on, our uniforms are made to last, but even after they've been put through their paces by our colleagues, flown thousands of miles around the globe and are no longer fit to be worn, they're creatively reused and recycled.



In 2011 we recycled over 16 tonnes of our uniforms into items such as filling for car seats, flocking and felting.



To reduce waste, crew are never given a replacement uniform until they've returned their old one. Once a uniform is returned, all the buttons are carefully snipped off and used for spares. For security reasons, any 'branded' old items are cut through. They're then shredded and recycled – for example as filling for car seats, flocking and felting.

In 2011 Virgin Atlantic uniforms stores recycled 16.16 tonnes of our uniform items through our innovative partner LMB.

Any non-security sensitive uniform items are also re-distributed by LMB, providing a source of income to local traders in a number of countries from Uganda to Hungary.

For more information take a look at www.lmb.co.uk



Our stylish uniforms are made to last, but are also creatively reused and recycled at the end of their working life.



Sustainable luxury in our Gatwick Clubhouse

Clubhouses

Virgin Atlantic Clubhouses are pretty special places, where our lucky Upper Class passengers get to start or finish their journey with the luxury of a delicious meal or snack, a massage in the spa or just some downtime with a coffee and the paper. What they may not realise is that this is luxury of the sustainable kind.

By 2012, the Gatwick Clubhouse had reduced its waste by 67% since 2008.

For example, from a standing start, our London Heathrow and Gatwick Clubhouse teams have done some amazingly hard work to reduce and manage their waste. In 2008 (when all waste was sent to landfill), both Clubhouses carried out a waste audit with a team of external consultants, weighing every single waste item they generated, to get a detailed picture of the nature and size of their landfill waste and come up with some innovative solutions to reduce, reuse and recycle it.



Bamboo handtowels can be washed and reused

Today the waste picture is a very different one. From **Tables 3 and 4** in the Appendix, you'll see that two further audits, in late 2010 and early 2012, have shown that the teams' hard work has produced some fantastic results.

For example, in 2008 the Heathrow Clubhouse was producing an average of 540 kg of waste per day; over the course of a year that amounted to the weight of one of our aircraft. By 2012, the Heathrow Clubhouse had reduced its overall waste by 41% compared to 2008 levels, and the Gatwick Clubhouse by 67%.



Recycling has gone from strength to strength and from 100% landfill in 2008, this has been reduced to 36% at Heathrow and 8% at Gatwick in 2012.

At our Clubhouses, 100% landfill in 2008 has been cut to 36% at Heathrow and 8% at Gatwick.

How have they done it? By...

- Proactively **developing good relationships** and dialogue with waste contractors and airport authorities, to make sure they have the most suitable facilities to segregate waste;
- Working with catering contractors to **reduce waste generated**;
- **Eliminating tray liners** and reducing the number of napkins needed – plus making sure that those used can be recycled;
- Providing water in glass bottles or jugs;
- Replacing paper towels in the washrooms with **bamboo handtowels** which feel thick and luxurious but can be washed and reused;
- Working with suppliers to **reduce and reuse packaging**;
- Introducing a **‘fax to screen’** system and double-sided printing, and reusing paper not containing confidential information;
- **Eliminating passenger bins**, so every bit of rubbish can be properly segregated;
- **Recycling** glass, newspapers, magazines, paper, cans and plastic, items from ink toners, cartridges and batteries, to metal – even the wire from champagne bottles;
- **Segregating food waste** which is collected in biodegradable bags to be either composted as soil fertiliser or burnt to produce electricity which is fed back to the national grid. The Heathrow Clubhouse has even installed a magnetic bin to catch any cutlery thrown away by mistake;
- Sending any general waste which cannot be recycled to be heat treated and turned into **solid fuel for energy** at a Mechanical Biological Treatment plant;
- Engaging colleagues through visits to their waste contractors to see the fruits of their hard work, and **appointing recycling champions**.

Once their corks have been composted with the Gatwick Clubhouse food waste, our champagne bottles and other glassware are recycled to continue their life as building and playground sand.



Sustainability was also a consideration when the Gatwick Clubhouse was refurbished. We used FSC timber flooring to wind through and connect the magnificent facilities on offer to passengers. The 100% woollen carpets are specified with low chemical emissions, enhancing the cleanliness of the Clubhouse environment whilst providing an extremely durable finish. And our site waste management programme has reduced construction waste on site by some 40% through considered prefabrication of much of the furniture, fixtures and fittings.

Off-aircraft waste

Re-using or recycling waste from onboard our aircraft is tricky. This is due mainly to international catering waste (ICW) regulations (also known in the trade as 'Cat 1'), which mean any disposable items that have been in contact with any food products must be incinerated or deep landfilled as a disease control measure. This, along with space



Off aircraft waste: a tricky issue

constraints onboard and the fact that the waste is off-loaded and dealt with by third parties (cleaning and catering companies and the airport authority) currently makes it challenging for us to obtain and monitor accurate waste data and reliably assess the effects of our waste management activities. We're therefore reviewing our targets in this area.

We're pleased to say the percentage of catering waste re-used or recycled is going up.

Table 5 in the Appendix summarises the data we have for Heathrow, Gatwick and Manchester. In the coming months and years we'll be doing more to push our industry partners for better waste data, as well as continuing to reduce, re-use and recycle as much as we can.

The waste coming off our aircraft falls into four main categories.

1. Catering waste is taken off the aircraft and managed by our catering provider. As Virgin Atlantic's waste is mingled with catering waste from other airlines and not weighed separately, the data provided is estimated by the catering company. We're pleased to say the percentage of catering waste re-used or recycled is going up, and that almost all our residual waste is now diverted from landfill to a Waste to Energy facility. Through waste segregation by the cabin crew and by our caterers, we'll continue to do as much as we can whilst complying with international catering waste laws.
2. Amenity kits, headsets and other items we provide to our passengers are reused and recycled by our partner MNH (see below for more detail on the work they do). Bulk-loaded newspapers and magazines (including our Retail Therapy and Seatback publications) are also recycled;
3. Passenger cabin waste such as their own newspapers, magazines, books, as well as cans, plastic bottles and cups are currently handled by the relevant airport authorities and either incinerated (e.g. for Waste to energy) or sent to landfill, due to the risk of ICW Cat 1 contamination issues. From previous audits, we estimate our annual passenger and crew cabin waste to be approximately 2,428 tonnes;
4. Aircraft fixtures and fittings: for example, foam from our old aircraft seats is recycled through our ground Facilities department together with office furniture, and at present seat foam tonnages are not calculated separately. On the basis of the number of boxes of seat foam recycled, we estimate that the foam from about 5,800 seats was recycled in 2011 (see over).



Papers and magazines form part of the waste from our flights

Senator



We've been working with Senator to recycle old seat foam to create household carpet underlay. The foam is baled up and sent to Ezifloor (who make carpet underlay for different brands). They put the foam through two separate granulators to chew the foam into smaller pieces, clean it, heat it up and then glue and press it together to form a long roll of carpet underlay. See www.senator.co.uk



Old seat foam from our aircraft is recycled to make carpet underlay

MNH



MNH Cabin Services helped us divert nearly 700 tonnes of cabin waste from landfill in 2011 by reconditioning and recycling.

MNH Cabin Services helped us divert nearly 700 tonnes of cabin waste from landfill in 2011 by reconditioning and recycling a range of items including headsets, amenity kits and pillowcases (see Table 5). If unsalvageable, some of these products are given a creative new lease of life.

For example, broken headsets are dismantled and the sponges used to surface training areas in equestrian centres, the copper wire goes for use in computers and mobile phones, and the plastic is used in manufacturing water butts and compost bins. Fabrics can be shredded for fillers in car insulation, roofing felts, furniture padding and cloths. In 2011, we started sending two new waste streams – our old blankets and pillows – to MNH. Pillow stuffing is recycled to make polyester fibre for clothing (e.g. fleeces or padding for inside jackets) and outer covers are recycled to make general household plastic items such as buckets, bowls and containers.

In 2011, MNH started sending any residual waste (which can't be re-used or recycled) to a waste to energy facility. So not only is this now a zero-to-landfill operation but it also produces electricity from the leftover rubbish.

MNH is a company we at Virgin Atlantic are particularly proud to work with. They find creative solutions to reusing and recycling items that don't fit usual recycling patterns. They also have a great company ethos – focusing on making a positive contribution through their work both to the environment and their community. For example they also work overseas with our charity partner Free The Children and collaborate with HM Prison Enterprises and disability charities to provide work which teaches employment skills and promotes self-esteem.

For more detail on the great work MNH do check out www.mnhscs.com



MNH find creative solutions to reusing and recycling items that don't fit usual recycling patterns.



Our recycling partner MNH sorts through our passenger amenity kits and headsets



Our recycling partner MNH is a zero to landfill operation

Water

Some of our aircraft exterior cleaning is carried out in South Africa using a 'dry wash' system.

Until recently we had little data on our UK water use, so our first step over the past year has been to address that. We're now collecting fully measurable data for all UK sites where Virgin Atlantic is responsible for water consumption, to create an accurate base year from which to measure and reduce our future water use.

In the meantime, we're conscious that water is a precious resource, both in our destinations and here in the UK. So we're already taking a number of different steps across our business to save water. For example, clean aircraft are more aerodynamic, reducing our fuel burn and carbon emissions. But we're also mindful of the water used for this, so some of our aircraft exterior cleaning is carried out in South Africa using a 'dry wash' system. The cloths used to hand polish the planes are washed and recycled or, when they get too grubby, are burned in an incinerator, which generates electricity.

On the ground, water butts have been installed at The Base. The water collected helps to maintain planted areas including our onsite wildlife garden.



Rainwater is used to water planted areas including our onsite wildlife garden



New taps offer an estimated 60% reduction in water used

Virgin Atlantic prides itself on being innovative and we're currently working with external advisors to continue to explore and research a number of new water saving initiatives...

We've also reduced the water pressure at The Base to cut down on wastage, and we're currently installing aerated taps there, in our new properties, and to replace any taps that fail across the business. A reduced flow rate design means these taps will achieve an estimated 60% reduction in the amount of water used per tap.

Commercial dishwashers in our UK Head Office and Training Centre staff restaurants have been replaced by more energy and water efficient models - this will save an estimated 90,000 litres of water every year. Our office cleaning contractors now use microfibre cloths, which significantly reduce the amount of chemicals and water used during cleaning, as well as a floor cleaning machine, which uses some 80% less water than a traditional 'scrubber-drier'.

Virgin Atlantic prides itself on being innovative and we're currently working with external advisors to continue to explore and research a number of new water saving initiatives, so do watch this space.

Sustainable design and buying

Virgin Atlantic buys aircraft engines to envelopes, and everything in between. Whether they're 'big ticket' items like our new aircraft (our new Airbus A330-300s and the Boeing 787-9 'Dreamliners' we have on order)...

We've used new, more sustainable materials to serve our onboard meals.



Our new A330 aircraft are 9%/15% more efficient on a per-trip/per-seat basis, and the Dreamliners we've ordered are 25% and 27% more efficient per-trip/seat

...to the seats our passengers sit in...



...to the coffee they drink, or the cup they drink it in...



...we consider the impact of the things we buy, where they come from, how they were produced and by whom.

Sustainable procurement policy

We have around 3,000 suppliers, so driving sustainability through our supply chain is a big task. We started by focusing on ensuring that our new and renewing suppliers are signed up to our comprehensive sustainable procurement policy. This sets out a range of conditions, from ensuring that staff are paid a fair wage and that no child labour is used in the manufacture of the products we buy, to reducing the environmental impact of our supply chain. We prioritised those suppliers with whom we spend the most, and so far, excluding our major fuel suppliers, those signed up to our policy represent 26% of our annual supplier spend.

Sustainable fuels

We're also putting a lot of work into sourcing commercially viable sustainable fuels to power our aircraft.



We're also putting a lot of work into sourcing commercially viable sustainable fuels to power our aircraft – in particular through our partnership with low carbon fuels company LanzaTech.

Renewable energy

Back on the ground, we've been buying greener electricity for our UK premises over a number of years, on tariffs that have become progressively less carbon-intensive over time. 99.5% of our UK electricity is generated from a mixture of renewable sources (such as wind, hydro-electric and biomass power).

Stationery


In the last year, we've carried out an environmental audit of all the stationery items we use around the business. We made an instant switch for around 20 items to more sustainable alternatives and are committed to identifying more. We've also set ourselves the target of providing our colleagues with 100% recycled or environmentally sourced paper stock by the end of December 2012.



The first and second tier suppliers of our uniforms have been audited against robust working conditions standards

Uniforms

Our stylish staff and crew are instantly recognisable in their distinctive Virgin Atlantic uniforms. The team behind the uniforms is just as proud of their sustainability credentials too. Manufacturing is now carried out closer to home so we can more closely monitor working conditions (which are audited), as well as reducing the distance over which materials have to be transported and therefore their carbon footprint. Fabric for our uniforms' red and grey suiting is now woven in Bulgaria and Italy rather than in Asia. It's made from cotton and wool, a hardwearing textile to promote longevity. Garments are manufactured in Portugal, as are the beautiful red shoes our female cabin crew wear.



Manufacturing is now carried out closer to home so we can more closely monitor working conditions, as well as reducing their carbon footprint.



Blouses and shirts are made in China and Sri Lanka, and shipped to the UK. All our first and second tier suppliers have been audited by our uniforms agent Incorporatewear against robust working conditions standards. Incorporatewear report to us quarterly on these aspects of the manufacturing process.

We're the only airline to have made a public commitment to Fairtrade.



Fairtrade products on sale in our staff restaurant

Fairtrade

We're the only airline to have made a public commitment to Fairtrade. We offer a number of Fairtrade products in our staff restaurants. Onboard, the tea, coffee, sugar and now also the delicious hot chocolate we serve is Fairtrade certified. Our Upper Class passengers enjoy a complimentary bar of Fairtrade Divine chocolate as part of their new menu. The cocoa beans for both these products are sourced from the Kuapa Kokoo Union producer group in Ghana – one of our destinations. With every purchase we're helping local communities with the income for clean water for toilets and drinking water, a mobile health programme, day care centres, classrooms and HIV awareness workshops. It's chocolate you can feel good about eating, in more ways than one.



Fairtrade Divine chocolate, part of our Upper Class menu



We also organise Fairtrade Fortnight colleague events. This year, our people took over 300 individual 'steps' which ranged from deciding to promote Fairtrade to passengers, to holding a dinner party using Fairtrade products.

We also serve 'One Water' on all our flights. 100% of One Water's profits go to fund clean water and other sustainable development projects in Africa – take a look at www.onedifference.org

Community Investment

About Free the Children



“You should always strive for your giving to achieve not just something but everything possible.”

Caroline Fiennes, *It Ain't What you Give, It's The Way That You Give It.*

“You should always strive for your giving to achieve not just something but everything possible.” (Caroline Fiennes, *It Ain't What you Give, It's The Way That You Give It.*) At Virgin Atlantic we believe this is true and through our long-term partnership with Free The Children (FTC) we're able to do just that. It's not just about giving cash and hoping it will do some good. It's about rolling our sleeves up alongside Free The Children, involving our colleagues, passengers, clients and suppliers to effect real and sustainable change in some of our destinations. We're striving for our giving to achieve not just something, but everything possible.



Caption to come



Craig Kielburger

FTC was founded in Canada in 1995, by 12 year old Craig Kielburger, who read about child labour in developing countries and was so moved he decided to take action. The organisation has since grown into the world's largest network of children helping children through education, with more than one million young people involved in their innovative education and development programmes in 45 countries.

Since the partnership began we've donated over £2 million to Free the Children. The long term impact this is having is phenomenal.

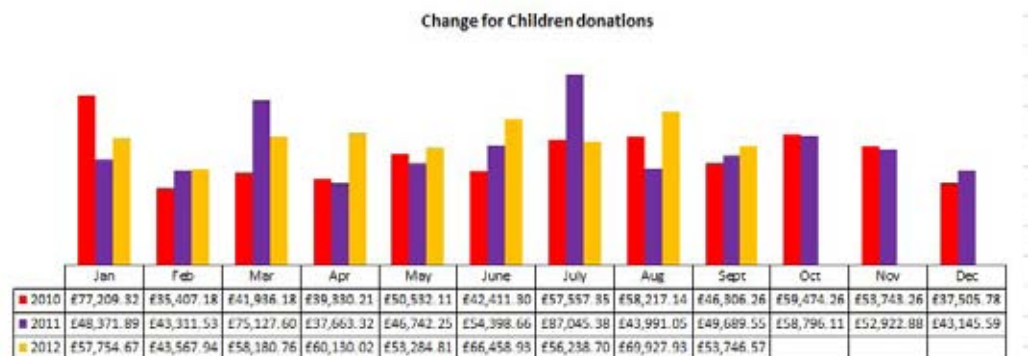
Fundraising

Virgin Atlantic raises funds through staff fundraising activities as well as passenger donations. Those funds are used by FTC to support projects in some of our destinations, as well as in the UK. **Since the partnership began we've donated well over £2 million to FTC.** The long term impact this is having is phenomenal, as our colleagues and passengers are seeing first hand.

Engaging our passengers and our people in supporting FTC

Our passengers

Simply by asking passengers to donate their loose change in charity envelopes in their amenity packs, Virgin Atlantic's Change for Children appeal **raises approximately £50,000 a month.** In 2011 it raised £643,000 – a 7% increase on 2010. And **August 2012 was a record-buster month: our passengers donated nearly £70,000** in that month alone... they're simply the best.



* 3 'peaks' in January 2010, March 2011 and July 2011 were emergency disaster appeals

Donating Flying Club miles

In 2011, our passengers donated more than 4 million of their accumulated Flying Club miles, which enabled young people from the UK to participate in FTC's international volunteer trips to China, India and Kenya. These are organised as part of a leadership training programme and provide them with a forum for discussing environmental and social justice issues and the impact on communities in developing countries.

virgin atlantic
flyingclub



28 young people on Scholarship trip to Kenya

In 2011 our staff raised an incredible £230,000 for Free The Children

Our people 'fun'raising – Passionate, caring and adventurous

In true Virgin spirit, our colleagues approach fundraising with fun, enthusiasm and determination to help change lives. **In 2011 they raised an incredible £230,000. £72,000 of this was raised by 195 staff** taking part in a number of global adventures. One of these was our India bike ride, involving sixty-four colleagues including Steve Griffiths our Chief Operating Officer. They flew to Delhi, took the night train to Jodhpur and rode local bikes the 260km to our partner community, Udawad in Rajasthan, arriving with sore bottoms but big smiles to hand the bikes over at a celebration party. Our Flight Safety Manager Rob Holliday completed the trip in a wheelchair bike and arranged to take 12 wheelchairs to donate to local people in desperate need of mobility. Not only did our people pay for this trip and the bikes but also **raised over £32,000** for FTC's work in Udawad.

| 2011 | Amount raised | Staff |
|-----------------------------|-------------------|------------|
| London Marathon | £15,127.94 | 11 |
| Mount Kenya climb | £23,882.70 | 45 |
| Mount Fuji climb | £11,624.45 | 40 |
| India Bike ride | £32,317.83 | 64 |
| UK Coast to Coast Bike ride | £3,233.72 | 20 |
| Nairobi Marathon | £1,825.41 | 15 |
| | £72,884.11 | 195 |

Adventure funds



260km ride finally comes to an end with 60 staff arriving in Udawad on their bikes

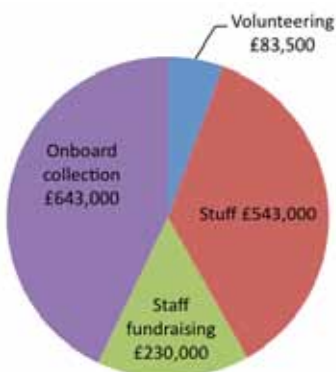


Kevin, one of 60 colleagues who rode 260km into Udawad and donated his bike to the community

Of course not all staff 'fun'raising is this exotic. Other schemes include 'Pennies from Heaven' where staff donate pennies from their monthly salary. We also offer colleagues unneeded corporate events tickets in return for a donation to our FTC campaigns, as well as a steady flow of colleagues organising 'fun'raising activities such as fun runs, raffles, quiz nights and golf days.



LHR Clubhouse staff fun run



2011 Charitable giving = £1,499,550

2011 was an exceptional year. As **Table 6** in the Appendix shows, £1.5 million was given in time, stuff and money.

Our FTC partnership – the detail, the impact

Our partnership with FTC focuses on two main programmes: the UK Schools' Programme and our International Development programme.


FTC UK Schools Programme:

Year 2 – 2011-2012

Virgin Atlantic funds FTC's UK Schools programme aimed at children aged between 7-18 years. We are pleased to say at the end of its second successful year (2011-12), it has surpassed our objectives in engaging UK young people to make a positive difference to their own and others' lives. Existing schools have been supported and new schools engaged. See **Table 7** in the Appendix.

The school programme has two parts. A motivational speech in assembly to the entire school (heard by 16,000 students each year) followed by a 'Leadership and Entrepreneurship training workshop' for around 30 students selected by the school (2,340 in year 2011-12). In this workshop, the young people debate social and environmental entrepreneurship. FTC's staff work as mentors with the students, thus reducing teacher workloads and supporting existing curriculum objectives.

Youth in Action Groups (YIAGs) are then formed bringing together exceptional students from different schools along with their teachers to learn how to bring change to their local and global communities. The participants also have an opportunity to hear inspirational speeches from FTC speakers and come away with new friendships, connections and memories to inspire them on their path to making a difference. FTC use social media to connect with young people and keep them informed.



These workshops equip young people with resources and knowledge, as well as clear action plans to take back to their school and community.



Our Free The Children UK schools programme 'Be The Change' engages young people to make a difference locally and globally

Youth events

38 students from 12 schools also attended FTC's second annual Youth Summit in March 2012 'It Starts with One...', which refers to the power of individuals to effect local and global change. These workshops equip young people with resources and knowledge, as well as clear action plans to take back to their school and community, to be ready to inspire others to join them in 'being the change'.

In the 2010-2011 school year 30 students were awarded international scholarships to visit FTC communities in Kenya, and another 28 scholarships have been awarded for 2011-2012. Young people fundraising for FTC's 'Adopt a Village' international development programme (described below) are able to have their donations matched pound for pound, up to £2,500 per project, from a £150,000 'Matching Fund'. £6,558 has been provided so far.



Virgin Atlantic staff engagement

An exciting part of the UK school programme is that there are lots of opportunities for our colleagues to be involved, for example through assisting in facilitating discussions, bringing their enthusiasm for the FTC programme directly to young people. Staff have

combined their own passion and interests to support FTC in the UK in other ways too. For example, the Virgin Atlantic HR team are providing mentorship to FTC staff on best practices including hiring, recruitment and retention.

We Day UK

What is 'We Day'?

The FTC programme originated in Canada. Since 2007, over 160,000 Canadian 11-18 year olds have attended We Day – these are annual events organised by FTC, held in stadiums, featuring inspirational speakers and popular artists, attended by thousands of children from FTC-participating schools. The events help focus young people's energy and passion to be change-makers, showing them they're not alone in their journey to make a difference.

Featuring speakers and artists such as Mikhail Gorbachev to Justin Bieber, Dalai Lama to Nelly Furtado, We Day shows that change – local and global – is not only possible but that it's cool to care. And when the music fades and the cheering dies down, We Day kicks off a year-long school programme that inspires a generation to get involved in social issues, providing them with the practical tools to turn inspiration into action.



We Day is about young people coming together to lead global change, overcoming apathy and empowering the next generation to make a difference in the world.



Holly Branson at We Day, Vancouver, October 2012

In October 2011, Richard and Holly Branson spoke at We Day in Vancouver, where they vowed to bring the event to the UK. We're very excited to announce that We Day UK is happening on 11 October 2013 at Wembley Arena – chosen because of its location, transport links and ability to host as 'green' an event as possible. FTC plan to host over 5,500 young people from FTC-participating schools across the UK, and are working with local education authorities, teacher associations and the Cabinet Office to form educational partnerships and link the event with government initiatives. Young people will be involved in the planning from the outset.

FTC International Development projects

Our international development projects with FTC are focused on delivering real and sustainable improvements on environmental and social justice issues in some of our destinations. With the funds raised through our onboard donations and colleague fundraising activities, Virgin Atlantic supports communities in India, China and Kenya. We are also now developing a new programme with FTC in Ghana. We are committed to creating opportunities for children and families living in remote rural areas to escape the cycle of poverty and preventing mass migration to the cities.

Importantly, the communities themselves are involved in defining and delivering the change they want to see in their villages.

The 'Adopt a Village' programme

FTC bases its international development approach around its holistic, sustainable 'Adopt a Village' model. This supports development for marginalised children and their families by working with communities to provide the means, support and skills, so that villagers can become self-sustaining in the long term. Importantly, the communities themselves are involved in defining and delivering the change they want to see in their villages.

Through its 'four pillars', the Adopt a Village model provides communities in developing countries with:

1. Quality education;
2. Clean water and sanitation systems;
3. Health care and wellbeing programmes;
4. Alternative income generation programmes.



To date, the worldwide FTC programme has provided over 650 schools to children in developing countries, as well as providing education, clean water, health care and sanitation to one million people around the world. We're pleased to partner with such a great organisation on sustainable community development initiatives in India, China, Kenya and Ghana.

In addition to the Adopt a Village model, Virgin Atlantic sometimes supports other specific projects, where there is a clear need to be addressed and additional funds have been raised.

Using local people and local supplies

There are sometimes negative press reports on charity funds not reaching those who need them. FTC doesn't outsource any of our projects – every penny is accounted for and gets to where it is needed most. Everything is done 'in house' and carefully overseen by FTC's loyal, hardworking and trusted staff, including staff members living within the communities we support. They gain the trust and involvement of local elders and community members. FTC also employs local people to help manage work on the 'four pillars' in each community – education, water and sanitation, healthcare and income generation.

China



Aluo, China Village results (see Appendix, Table 8)

Population: 5,220

Households: 1,004

Adult population: 4,190 (80%)

School age children under 18: 1,030 (20%)



Schoolchildren in our FTC partner community in Aluo, China

Education

In China, big educational disparities between urban and rural regions mean 11 million children are unable to attend primary school. FTC is addressing the root of the problem by partnering with local governments to build more rural schools. Since starting work in Aluo, seven classrooms have been built and equipped, providing quality primary education to 245 students every day. That's already a 73% increase since the project started. There's a good split between girls and boys, who are proud to come to school in their uniforms funded by FTC.

Two new teachers with university degrees have brought positive changes to the school. 98% in Aluo speak only the local Yi language, but students and teachers can now learn Mandarin, increasing the opportunities available to them. Before FTC arrived, some students were walking over two hours to attend school each day, arriving tired and struggling to learn. So three teachers' offices have been turned into dormitories to accommodate over 40 students, who are now making great strides in their education.

Water and sanitation

Aluo now has clean water access points, maintained by the school headmaster. The clean water is piped from a nearby mountain spring to the community. Community members now have access to three hand-washing stations and four latrines, significantly improving sanitation.



New, clean water access points in Aluo significantly improve sanitation

Healthcare



Virgin Atlantic funds have enabled schoolchildren in Aluo to attend health workshops and a FTC funded medical doctor visits the community monthly

A FTC funded medical doctor visits the community monthly to provide educational workshops and treat common illnesses like respiratory issues, foot problems and parasites commonly caused by animals sharing living space with families. Two community health workers have been trained, and health workshops teach all school students and families about the importance of hygiene and proper water usage.

Alternative income

In November 2011, the Chinese government raised the rural poverty line to 1 USD (64p)/day – doubling what it had been historically, although still well below the World Bank definition of absolute poverty being an income of 1.25 USD (81p)/day or less. FTC's target is to work with a segment of the population who have school-aged children to increase household income above the rural poverty line through income generation projects and debt management. Currently 90% of the community face debt.

Alternative income programming is now well underway. By the end of this year, 150 goats will be purchased. They'll be fed and kept together by a professional goatherd in a large field instead of distributed to community members, to help decrease the cost, strengthen management and ensure the sustainable development of this programme.

A group of 20 women are producing traditional local handcrafts, sold in local markets. The local government is helping to outreach to new markets and vendors.

New community

FTC started its work with our new partner community, Shu Jia, slightly behind schedule in January 2012. We'll report on the progress already being made, in our next report.

Kenya



Sikirar Kenya Village results (see Appendix, Table 9)

Population: 990

Households: 123

Adult population: 1,738 (79%)

School age children under 18: 462 (21%)



Sikirar Environment Club



Sikirar students receive their daily lunch as part of the nutrition programme

Education

School enrolment and regular attendance in Sikirar has increased by 25% since Spring 2010. As of Spring 2012, enrolment and regular attendance is at 335 pupils, exceeding our original target and there's almost gender parity amongst students attending regularly (see Table 9 in the Appendix). Three classrooms have been built and equipped so far and a fourth is currently being constructed. Four new female teachers act as strong role models for girls attending primary school, and pupils' success is celebrated to encourage them to achieve their potential and instil a sense of pride and ownership of development activities in the community.

The school environmental club's new demonstration vegetable garden is flourishing thanks to a drip-irrigation system made possible through Virgin Atlantic support. The garden supports the school's nutrition programme, ensuring all students are given a healthy and filling lunch so they can focus on learning without being hungry. It also provides practical learning on best agricultural practices and farming techniques for Sikirar community members who can replicate them on their own land, ensuring they also get the nutrition they need. Since FTC began working with the community over 400 trees have been planted.

Water and sanitation

The new borehole at Sikirar primary school is used by the entire community for domestic and animal use. Thanks to this clean water source and the two handwashing stations and four latrine

blocks, general cleanliness has improved and waterborne diseases reduced. Girls can also now spend more time learning rather than carrying water.



Pupils excited with the drilling of a new well at Sikirar Primary School

Healthcare



Sikirar students carrying bright orange lunch pails

A particular health issue in the community is intestinal worms, which can be painful, and lead to children missing school. Primary school students have attended deworming clinics and

four health workshops, and are now aware of different ways diseases are contracted and what they can do to prevent them with locally available nutrients.

Alternative Income

Free The Children helps to ensure the financial viability of its projects through merry-go-rounds which is an indigenous lending and savings circles practiced in Kenya. Merry-go-rounds enable community groups to make a significant investment in improving their own livelihood, while also contributing up to 25 per cent of their savings towards a sustainability and maintenance fund

for the development projects. Four active women's groups in Sikirar, with 14 members each, meet regularly. The women are able to better their families' livelihoods, developing trust in their groups and gaining financial literacy skills and knowledge – equipping them with the skills to generate sustainable income. Their average yearly income is now £648 compared with £117 in 2010.



Ngosuari, Kenya Village results (see Appendix, Table 10)

Population: 1881

Households: 300

Adult population: 1,341 (71%)

School age children under 18: 540 (29%)



Ngosuari School Pride Programme celebration

Education

FTC believes that education, particularly for girls, gives the highest return of any social investment in the developing world and so this is its priority focus when working with a new community such as Ngosuani. It's a predominantly Masaai community, where the primary school educates 417 students up to grade eight (age 14). The first of five planned classrooms has been built and equipped. Boarding facilities, constructed by the community, are now available for some students, primarily

girls, who come a long way to attend school. Boarding helps them study better and for longer, reducing rates of early marriages and pregnancies.

Students have already demonstrated academic progress. In the FTC School Pride Programme awards in February 2012, Ngosuani primary School was awarded third place in the national exam, as well as first place best overall student, third place best student in science and a 1st, 2nd and 3rd place teacher.

Water and sanitation



Opening of a new borehole

The nearest water source is currently 12 km (7 miles) away from the community – around a six to eight hour walk with long queues every day for water collection. This burden generally falls to women and girls, leaving little time for income-generating activities or school. Very few community members currently have access to hand-washing stations or latrines, or boil water for household use. Developing a borehole and other water stations is a considerable investment and requires commitment from the community so a water management committee has been set up to work on this project, as well as water and sanitation workshops.

Healthcare

The Ngosuani health clinic is 10 km (6 miles) from the community. Following a comprehensive needs assessment, deworming clinics were started. There are now monthly mobile health clinics and lessons teaching

students about the prevention of common diseases and the importance of hygiene and sanitation. Forty active students in the new school health club are currently developing a community magazine on best health practices.

Alternative Income



Ngosuani meet to discuss Alternative Income programming

Alternative income initiatives begun in Ngosuani have attracted a high level of interest. Sixty women have met to discuss community lending through the 'merry-go-round' model. The women have also formed three groups, each with an elected Chairwoman, secretary

and treasurer. They will now decide on and develop their own small projects. The women taking part in these groups have also had the added benefit of meeting with the FTC nurse to discuss health indicators, sanitation best practices and social development.

Additional Virgin Atlantic-funded FTC projects in Kenya



Health care teams have been training students about balanced diets, focusing on avoiding deficiencies that may lead to malnutrition and rickets.

Emergency Nutrition, Kenya

Severe drought across East Africa in 2011 meant annual harvests failed, leaving families with little to no food. This directly impacted the Kenyan communities Virgin Atlantic supports, so FTC created a short and long term emergency nutrition programme.

Short term projects

FTC implemented a 12-month feeding programme of daily fortified nutritional meals of soya, maize, minerals and vitamins for 6,000 school-aged children. This has enabled them to concentrate more in their studies, and thrive outside the classroom – leading to high school retention rates compared with past years. Health care teams have been training students about balanced diets, focusing on avoiding deficiencies that may lead to malnutrition and rickets. Over 3,500 vulnerable pregnant and breastfeeding women and infants under five received health care advice and nutritional supplements.



Irrigation system installed at Sikirar demonstration garden

Long-term projects

Community Groups

Hands-on agricultural workshops at the medicinal garden teach community members about growing drought-resistant crops and kitchen gardens. These are effective methods for preventing family malnutrition and reducing the need to buy certain items in the market.

School Gardens

School demonstration gardens grow kale, spinach, tomatoes and onions. They provide young people with nutritious food, valuable farming techniques such as drip irrigation, and training to help them be healthy in water scarcity. Vegetables are also sold to support teachers' salaries.

Boreholes

Boreholes drilled by FTC over the past two years are providing most community members with reliable access to clean drinking water, keeping immune systems strong, reducing incidences of disease such as typhoid and decreasing time spent fetching water.



Four dairy cows and two calves have been purchased and workshops are teaching best techniques for cattle-rearing and crossbreeding.

Baraka Farm, Kenya

Dairy/animal farming



Women are learning milking techniques

Girls from Kisaruni Secondary School are learning milking techniques at the farm during agricultural lessons twice a week. 400 chickens and 12 goats have been purchased to be used to supplement nutrition and as teaching tools for alternative income groups.

Moringa plant and Napier grass cultivation

Moringa, 'mother's best friend', is one of the richest natural sources of vitamins and minerals. 112 trees have been planted and are harvested monthly at Baraka Farm. Virtually every part of the tree can be used: as a nutritional supplement for pregnant mothers and community members, or dried as fodder for the dairy cows. Napier, or elephant grass, is also being grown on two acres of land for additional cattle fodder to avoid having to purchase feedstocks from costly outside markets.

Organic waste management

Baraka Farm will turn organic waste from Kisaruni and Baraka Clinic's kitchens into rich compost, for fertiliser for the demonstration gardens.

Fish pond farming

FTC is currently consulting with the government about fish keeping, proper fish selection, pond dimensions and locations.

Fighting poverty through trade



In 2011 we were very proud to launch an exclusive range of beautiful handcrafted jewellery in our onboard Retail Therapy magazine. Each unique piece, made by women in the Maasai Mara, provides them with a sustainable income to support their families and send their children to school. In 2011 we sold over 2,936 items – sales of £24,860. 100% of this goes to FTC, half to the women producers and half reinvested into FTC's wider alternative income programme. This provides marginalised women with resources and skills they need to develop a small business such as jewellery making, agriculture, beehives,

micro loans and financial literacy workshops. Using local traditions and skills to develop employment avoids the negative impacts of community members leaving to look for work in urban areas.

Our people

Our passengers and colleagues visiting Kenya

As well as donating money, we love our colleagues and suppliers to meet the communities they support. In November 2011, our Director of Operations, Safety and Security, Corneel Koster, plus 39 of our people and suppliers from across the business, took annual leave to volunteer in Kenya. They visited projects supported by Virgin Atlantic and FTC, and stayed amongst a Maasai community. They learnt first-hand about global issues, helped build schools, and witnessed the impact our funds are having.

Feedback from our colleagues:

"This trip was a truly humbling experience. The partnership... with Free The Children delivers huge positive change, building a sustainable future for the children and their communities. I absolutely loved playing and singing with the kids and we all enjoyed being able to lay the foundation of the fourth classroom at Sikirar. The warmth and hospitality of the Masaai community is absolutely amazing..."

Corneel Koster, Director of Operations, Safety and Security



Some of our colleagues visiting Sikirar in November 2011



Flying Club Gold members visiting Kenya in October 2011

Our loyal passengers – Gold Flying Club

In October 2011, fourteen Flying Club Gold members visited our newest partner village in Kenya, to see first-hand FTC's fantastic work there. They came away with lifelong memories and friends, and a true understanding of what their hard work and generosity really meant to a remote village in the Maasai Mara. Having raised over £32,000 for the community, a year later they're still engaged – supporting the FTC London team and setting up a fund for exceptional girls in Kenya to get a secondary education.

"FTC is one of the most transparent charities I have ever seen ... its straightforward philosophies are a breath of fresh air. The 'no handouts' rule is fantastic. The enthusiasm of its people is contagious and the results are clearly speaking for themselves."

Andrea Thornton, St Albans

"The work undertaken by FTC is inspiring and worthwhile ... informed, intelligent and progressive. The principles that FTC embrace, including partnership with the community create equality in the relationship that helps guarantee success ... they work to create sustainable healthy and educated futures for the communities they support."

Richard Perry, Weymouth

Leaving Kenya

We have loved working with our communities in the Maasai Mara, and have always been given the most fantastic welcome from the people there. So it is with heavy hearts that we report that, for commercial reasons, since September 2012 we are no longer flying to Kenya. Even so, we are very pleased to report that our FTC Kenya projects now have their full programme of financial support from us and have made fantastic progress. We will of course be maintaining our contact and friendships with the people there and we wish them the very best as they move towards becoming fully self-sustaining communities.



India

Udawad, India Village results (see Appendix, Table 11)

Population: 817

Households: 138

Adult population: 504 (62%)

School age children under 18: 313 (38%)



Schoolchildren in their new classrooms in Udawad, India

Education

Delivering quality education means more than just building classrooms. So while two Udawad classrooms have now been furnished and equipped, essential FTC monitoring has highlighted that attendance still remains low, even with a 65% increase since 2010. FTC have therefore introduced a number of initiatives to help address the problems of poor teaching methods, low engagement with parents and children having to work or look after siblings while mothers work.

A community workshop was also held to address the issue of Udawad children working, by spreading awareness of child labour and generating dialogue around strategies to overcome it. Community members have since created a village youth forum to engage children and adults in the process.

For many children in Udawad, the promise of a hot meal at school is a strong incentive to increase attendance. A new school kitchen garden growing tomatoes, chillies and cauliflower supplements hot meals for the school lunch programme and day care centre. A committee of five local students are rewarded each month for maintaining the garden – demonstrating its importance and motivating future students to care for it.



Watering the new school garden

Water

The water programme in Udawad is due to start later this year.

Healthcare

The Udawad day care/health care centre (known locally as an 'anganwadi') was in desperate need of repair so attendance dwindled. FTC and the community have now rebuilt it and it's once again the community hub. The local nurse and FTC's local health mobiliser make household visits, encouraging villagers to take advantage of the healthcare offered by the anganwadi. It also provides child care support for children up to age six, giving them a hot meal so parents can work in the fields knowing their children

are safe, and older siblings are freed from childcare duties to attend school.



FTC's nurse providing a health workshop to women in Udawad

Alternative Income

The alternative income team are teaching women, children and the elderly about the advantages of vegetable gardens, which are key to reducing malnutrition in low-income

families, promoting food security and providing the possibility of a cash income from surplus produce. Eighty-one households are now benefiting from this programme.



Improved farming tools will increase productivity and reduce hard work loads



More productive seed types to suit the terrain and soil type

Additional project: the Watershed project, Udawad

Without water and irrigation systems, community members in Udawad are unable to cultivate their own fields and have to travel elsewhere as migrant labourers for most of the year. FTC is in year two of a unique watershed project.

Hydrological assessment and soil testing has been carried out, and over 51% of the stone bunds, stone check dams and staggered trenches are now completed. Next steps are: training for the community to improve agricultural and livestock breeding techniques; adopting hardier and more productive crop seeds to suit the terrain and soil type; and using improved farming tools and methods to increase productivity and reduce the long hours of labour needed to produce crops.

The completed project will increase livelihoods through better use of natural resources, conserve rainwater, recharge groundwater, control erosion and promote sustainable farming. It will also empower the women through new employment opportunities, using local knowledge to grow local economies.



Kamoda, India Village results (see Appendix, Table 12)

Population: 862
Households: 130
Adult population: 709 (82%)
School age children: 153 (18%)

Education

Kamoda, one of the newest FTC communities in India now benefits from a brand-new school block with two classrooms offering quality education. Teachers report students coming to school well-groomed, and following

sanitary techniques they learned last year, including regular hand-washing. Girls participated eagerly in a recent football match – seen as a huge step towards equal treatment of boys and girls in the community.

Water and sanitation

The FTC team and community are also working to identify an appropriate location to drill a new hand pump, conducting extensive hydrological and geological surveys and working with the local government to obtain the required permits.



Girls in Kamoda using ash powder for washing their hands

Healthcare



Elimination of child labour workshop in Kamoda

In 2012 Kamoda's new 'anganwadi' was built, opposite the school. As in Udawad, the local nurse and FTC's local health mobiliser continue to make household visits, encouraging villagers to take advantage of healthcare and child care for under-sixes, to enable parents to work and older siblings to attend school.

Alternative Income

After much discussion, the women agreed buffalo rearing would be the best alternative income project, since most households depend on milk production for income generation. They'll rear a local breed, which can survive in difficult climate conditions. The women also received financial literacy training, and a goal is to eventually provide banking services to rural women to address a specific need identified in this community.



One of the women benefiting from the FTC programme in Kamoda, India



Smokeless Chimney Project, Kenya and India

Between January 2012 and December 2014, approximately 20 households per month will participate in this project – over 500 Kenyan and 250 Indian households. Modified smokeless chimneys will eliminate health hazards and, being extremely efficient, reduce the amount of firewood needed. This will help decrease deforestation and relieve the women and girls who spend hours collecting wood.

In Kenya, 93 chimneys have already been built and the team plans to complete 107 more by the end of 2012. The project in India is currently in the first stage. A field supervisor is overseeing the construction of ten chimneys in three communities; Udawad, Kamoda and Bagad. In the second stage, ten women will be employed to help build chimneys and promote their benefits.

Ghana

Asemkow, Ghana Village



Asemkow in Takoradi district, Ghana, is our newest partner community to benefit from FTC's Adopt a Village programme. Asemkow is a small fishing village on the beach surrounded by a secluded forest and rocky outcrops. Community members live on less than £1.90 a day and less than 50% of children regularly attend school. Out of those who do, less than 56% are gaining successful grades.

We are still in the very early stages of this new project. FTC believes that sustainable development takes time and is about far more than simply giving money to a community and looking for quick results. FTC's philosophy is that it's vital to sit and 'drink tea' with the elders, men, women and children and then 'drink more tea' to truly understand the community, its needs and to gain their full involvement in the programme.

FTC has so far met with over 150 community members, to discuss the needs that exist in Asemkow, learn about culture and community dynamics, and to begin the process of creating sustainable solutions to address the four pillars of education, health, water and sanitation and alternative income and livelihood challenges. Free The Children is also engaging with the local government to strengthen local ties and networks in Ghana. More information about this programme will be available in our next annual report.

Other charitable support



Shelterbox delivering vital aid in an emergency disaster



The contents of a Shelterbox

Emergency relief funding

Virgin Atlantic continues to provide emergency relief funding in response to various international crises, such as the Japanese earthquake and tsunami, and the drought and associated famine in East Africa. Over the last two years, we've given over £250,000 in funding to disaster relief projects as well as offering cargo space to Shelterbox and UNICEF to send vital equipment overseas.

Supporting additional UK charities

Over the last 12 months, we've donated over 100 flight tickets to good causes helping children and young people, such as Help a London Child, Great Ormond Street, children's hospices and others, so they can auction them to help raise valuable funds. Where possible we also offer help to fly children to other countries for life-saving medical treatment.



Rounding up

We hope you've enjoyed this year's sustainability report. We're keen to receive feedback so if you have any ideas or suggestions please contact us by e-mailing environment@fly.virgin.com or community.investment@fly.virgin.com

To find out more about our Change is in the Air sustainability programme, and to download our sustainability reports, visit: www.virgin-atlantic.com/changeisintheair

This report is available to download from our Change is in the Air website: www.virgin-atlantic.com/changeisintheair

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Appendix

Table 1 – UK ground energy performance

| | 2008-2009 (base year) | 2009-2010 | | 2010-2011 | | 2011-2012 | |
|-------------------|--------------------------|------------|-------------------------------|---------------------------|-------------------------------|-------------------------|-------------------------------|
| | | kWh | % change from base year | kWh | % change from base year | kWh | % change from base year |
| The Office | 11,811,952 | 11,240,545 | -4.84% | 12,150,689 | 2.87% | 10,557,968 | -10.62% |
| The Base | 8,783,074 | 7,779,371 | -11.43% | 7,983,373 | -9.11% | 7,086,262 | -19.32% |
| CRC | | | | 32,102,230 | | 28,491,970 ^a | |
| All sites | 36,755,786 | 36,106,222 | -1.77% | 36,500,565 ^(b) | -0.69% ^b | 32,769,415 | -10.85% |

^a Figures verified by our energy consultant EnergyTEAM and submitted to CRC Energy Efficiency Scheme in July 2012.

^b Due to a calculation error for energy use in our London Gatwick hangar, the figures for these two values in our 2011/2012 report incorrectly showed an overall increase in energy across all sites against our base year, whereas in fact we achieved a 0.69% decrease.

How is our data calculated?

In line with our CRC Energy Efficiency Scheme reporting obligations, we calculate our total energy consumption (gas and electricity) across all Virgin Atlantic UK-managed sites. We then submit data for our core sites, which account for 95% of our total energy consumption. They include our HQ The Office and training centre The Base, Virgin Holidays HQ The Galleria, some other smaller office and technical buildings, and the gas used by our Gatwick and Heathrow hangars, since we contract for this directly.

In the table above, the 'All sites' figure incorporates this CRC core energy data, plus the electricity used at Heathrow and Gatwick. We're not obliged to report this as part of our CRC submission, since it's provided by the relevant airport authorities, but include it here to provide a fuller picture of our energy use. However, the data does not include the diesel currently used in our Gatwick and Heathrow hangars to power the air conditioning units that are necessary to keep our engineers cool in the extreme temperatures they experience inside the aircraft while servicing them in the hangars. Separate data is not currently available for this diesel use.

Table 2 – Our UK ground waste management performance

| | 2008 tonnes (% of annual total) | 2009 tonnes (% of annual total) | 2010 tonnes (% of annual total) | 2011 tonnes (% of annual total) |
|-----------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| Total Waste | 1040 | 706 | 692 | 741 (29% reduction since 2008) |
| Total reused/ recycled | 422 (40%) | 304 (43%) | 369 (53%) | 506 (68%) |
| Total to Landfill | 618 (60%) | 402 (57%) | 323 (47%) | 235 (32%) |

Measured via monthly weight reports from our waste contractor

Table 3 – Our Gatwick Clubhouse waste

| | 2008 | | 2010 | | 2012 | | % change since 2008 |
|---|---------|------------|---------|------------|--------------------|------------|---------------------|
| PER DAY | kg | % of total | kg | % of total | kg | % of total | |
| Recycled waste | 0 | 0 | 24.6 | 57% | 21.9 | 66% | |
| Food waste (composted / burnt for energy) | 0 | 0 | 0 | 0 | 8.6 | 26% | |
| Other food waste | 0 | 0 | 12.2 | 28% | 0 | 0 | |
| General waste | 100.5 | 100% | 6.4 | 15% | 2.7 | 8% | |
| Total waste | 100.5 | 100% | 43.2 | 100% | 33.2 | 100% | - 67% |
| Percentage of waste to landfill | 100% | | 43% | | 8% | | |
| Waste per passenger | 0.98 kg | | 0.41 kg | | Not yet calculated | | |

Table 4 – Our Heathrow Clubhouse waste

| | 2008 | | 2010 | | 2012 | | % change since 2008 |
|---|---------|------------|---------|------------|--------------------|------------|---------------------|
| PER DAY | kg | % of total | kg | % of total | kg | % of total | |
| Recycled waste | 0 | 0 | 196.7 | 48% | 154.5 | 48% | |
| Food waste (composted / burnt for energy) | 0 | 0 | 0 | 0 | 51.4 | 16% | |
| Other food waste | 0 | 0 | 145.4 | 36% | 70 | 22% | |
| General waste | 540.4 | 100% | 66.3 | 16% | 44.2 | 14% | |
| Total waste | 540.4 | 100% | 408.4 | 100% | 320.1 | 100% | - 41% |
| Percentage of waste to landfill | 100% | | 52% | | 36% | | |
| Waste per passenger | 0.66 kg | | 0.55 kg | | Not yet calculated | | |

Note: waste from each Clubhouse is weighed over a 2-day period and a daily average figure used for the above table.

Table 5 – Off-aircraft waste for flights into London Heathrow, London Gatwick and Manchester Airports

| | 2008 tonnes | 2009 tonnes (% annual total) | 2010 tonnes (% annual total) | 2011 tonnes (% annual total) | Tonnage % change 2009/10-2011 |
|---|--------------------------|------------------------------|------------------------------|------------------------------|-----------------------------------|
| 1. Catering waste | | | | | |
| Catering waste re-used/recycled | No data available | 343 (12%) | 386 (13%) | 372 (12%) | + 8% |
| Catering waste incinerated (waste to energy) | No data available | 0 | 1,352 (46%) | 2,658 (83%) | + 97% |
| Catering waste sent to landfill | No data available | 2,593 (88%) | 1,212 (41%) | 184 (5%) | - 93% |
| TOTAL catering waste | No data available | 2,936 (100%) | 2,950 (100%) | 3,214 (100%) | + 9% |
| | | | | | |
| 2. MNH partner waste | | | | | Tonnage % change 2008-2011 |
| Headsets and amenity kits recycled | 683 | 600 | 551 | 608 | - 11% |
| Other items recycled (e.g. plastics, cardboard, paper, fabrics and textiles including pillows and cases etc.) | 109 | 68 | 58 | 84 | - 23% |
| Residual waste incinerated (waste to energy) | 0 | 0 | 0 | 7 | n/a |
| TOTAL MNH cabin waste diverted from landfill | 792 | 668 | 609 | 699 | - 12% |

Note: Our waste contractors' data collection methods have changed since our last report and so we have categorised items differently this year, making it easier for us to track our main items – headsets and amenity kits.

Table 6 – Charitable giving

| | 2010 | 2011 | Change 2010-2011 |
|------------------------------|---------------|---------------|------------------|
| Volunteer time | £37,725.00 | £83,550.00 | 121% increase |
| Stuff* | £250,000.00 | £543,000.00 | 118% increase |
| Staff Fundraising** | £250,000.00 | £230,000.00 | 8% decrease |
| Change for Children donation | £599,896.00 | £643,000.00 | 7% increase |
| Total VAA charitable giving | £1,137,621.00 | £1,499,550.00 | 32% increase |

*Flights, baggage, cargo, emergency disaster goods, marketing stock etc. As well as raising funds to support FTC projects in Kenya, India, China and the UK, each year we donate tickets to children's charities in our destinations, or to families with very poorly children who need treatment overseas.

**In 2010 25 London Marathon runners raised over £90,000, whereas in 2011 we only had 10 places

Table 7 – UK Schools' Programme

| Target | Year 1 March 2010 – July 2011 results | Year 2 Sept 2011 – July 2012 results |
|--|--|--|
| 65 schools to sign up for Be The Change school programme | 71 schools signed up | To date 78 schools but by end of school year, 94 schools will have been visited |
| 16,000 students will receive whole school motivational speech | 12,879 students received speech | 16,000 to date but by end of school year approx. 18,500 |
| 1,200 students will participate in student leader workshops | 1,200 + participated in leader workshops | 2,340 to date but by end of school year approx. 2,820 |
| 50% of students will form Youth In Action Group in support of awareness-raising or fundraising for FTC | 36 (51%) of schools reporting forming YIAG | 41 (52%) of schools reporting forming YIAG |
| 30 international scholarships allocated per year | 28 allocated international scholarships | 30 allocated from 190 applications. 2 had to withdraw due to personal circumstances. |
| £50,000 matching funding available for schools to apply for per year | Data to be reported next time | £6,558 ^a |

^a Although well below original targets, FTC is seeing young people taking meaningful action. Schools applying for funding have doubled this last year and nearly all schools have exceeded their fundraising goals. The UK operations team continue to encourage participation in the matching fund as one way to encourage action.

Table 8 – Aluo China performance results

| | Target for 2013 | 2010 | 2011 | Spring 2012 |
|--|---|-----------------------------|----------------------------------|---|
| EDUCATION | | | | |
| Students regularly attending school (from a baseline of 165 in 2010) | 300 (150 boys + 150 girls) | 165 (95 boys + 70 girls) | 235 (126 boys + 109 girls) | 245 (128 boys + 117 girls) |
| Classrooms built/outfitted with equipment and textbooks etc. | 7 | – | 7 achieved | 7 target already achieved |
| Library and books provided | 1 library; 100 books | – | 1 library and 100 books achieved | 1 + target already achieved – 1000 library books now provided |
| Teacher accommodation | 5 | – | 5 achieved | 5 target already achieved |
| Teachers | 7 | 6 male 1 female | 6 male 3 female | 6 male 3 female |
| Salaries paid for by government | 9 | 7 | 9 achieved | 9 target already achieved |
| Uniforms provided | 300 | – | 245 | 245 (matching the number of students currently attending) |
| WATER | | | | |
| Hand-washing stations built | 3 | 3 achieved | 3 target already achieved | 3 target already achieved |
| Latrine blocks built | 3 (one for teachers, boys and girls) | – | 3 achieved | 3 already achieved |
| Improved water systems | 3 | – | 3 achieved | 3 target already achieved |
| HEALTHCARE | | | | |
| Health, water and sanitation workshops provided | 2 | – | 2 target achieved | 8 target exceeded |
| Community health workers trained | 2 | – | 1 achieved | 2 target achieved |
| Students attending workshops | All students attending school | – | 243 achieved | 246 target achieved |
| Total number of people trained in community | 500 | – | 500 target achieved | 500 target already achieved |
| ALTERNATIVE INCOME (AI) | | | | |
| Women's groups | 1 ^a | – | – | 1 ^a |
| Women participated in AI programme – | Goat breeding programme to commence in 2012 | – | – | 20 producing local handicrafts to sell in local markets. |
| Annual yearly income (baseline of <£233.60 in 2010) | £300.00 | <£233.60 ^b | <£233.60 ^b | <£233.60 ^b |

^a In Aluo, FTC's work on alternative income and specifically through animal husbandry does not follow structure of women's group formation such as in Kenya and India. In China, they work with the family unit for animal husbandry programmes. The special artisans project is however a pilot to determine if the success elsewhere of this model will translate well in this context. Thus there is no expected number of women's groups, rather an expected number of households benefiting.

^b The goat breeding programme is school-based rather than household-based. A goatherd is nominated to take care of the goats and the money generated is spent on the school, to fund for example uniforms, teachers' salaries and nutrition programmes. The income for families is therefore currently lower than the target; it is intended that annual yearly income will be boosted by the artisans project.

Table 9 – Sikirar Kenya performance results

| | Target for 2013 | 2010 | 2011 | Spring 2012 |
|--|--|----------------------------|----------------------------|--|
| EDUCATION | | | | |
| Students regularly attending primary school (from a baseline of 194 in 2009) | 300 (150 boys + 150 girls) | 250 (135 boys + 115 girls) | 274 (141 boys + 133 girls) | 335 (173 boys + 162 girls) Target exceeded |
| Classrooms built/outfitted with equipment and textbooks etc. | 5 | – | 3 achieved | 4th under construction |
| Classrooms renovated with equipment and textbooks etc. | 3 | – | 3 target achieved | 3 target already achieved |
| Football pitch set up | 1 | – | 1 target achieved | 1 target already achieved |
| Teacher accommodation – construction and outfitting for 2 staff (double unit) | 1 | – | – | Under construction |
| Teachers ^a | 10 | 4 male 2 female | 5 male 1 female | 5 male, 5 female Target achieved |
| Salaries paid for by government ^b | 6 | – | 3 | 5 |
| WATER | | | | |
| Hand-washing stations built for 300 students | 2 | – | 2 target achieved | 2 target already achieved |
| Latrine blocks built for 300 students | 6 | – | 2 achieved | 4 achieved |
| Improved water system for 250 families | 1 | 1 achieved | 1 target already achieved | 1 target already achieved |
| HEALTHCARE/ENVIRONMENT | | | | |
| Health, water and sanitation workshops provided. | 3 every 6 months | 3 target achieved | 3 target achieved | 4 target exceeded ^c |
| De worming session for all students | 4 x twice a year | 5 | 7 | 4 |
| Students attending workshops | 300 | 40 | 40 | 113 girls, 128 boys ^d |
| Total number of people receiving healthcare – Sikirar provides ambulatory support to Baraka medical clinic | 1,250 people (250 households) | – | 990 | 990 |
| Infants & student benefiting from feeding programme | All students/infants | – | 345 | 345 |
| Household gardens planted with vegetables | 105 households (85% of all households) | – | – | 56 households now have gardens |
| Trees planted | 1800 | 100 | 850 (total to date 950) | 350 (total to date 1300) |
| Alternative Income (AI) | | | | |
| Women's groups | 4 | 4 | 4 | 4 ^e |
| Women/youth participated in AI programme. | 500 | 740 target exceeded | 784 target exceeded | 576 with target exceeded ^f |
| Average yearly income by Dec 2013 (from a baseline of £115 in 2009) | N/A | £172.50 | £172.50 | £438.86 |

^a Target teacher to student ratio is 1:40. However, typical student to teacher ratio is heavily informed by number of completed structures in community. At minimum, each school should be staffed by 1 teacher for nursery level, 1 teacher each for Grades 1 to 8, (total 9 teachers), plus administrator/principal. Target achieved for Sikirar.

^b Government will agree to provide 1 teacher for each free-standing classroom structure FTC builds in community: 5 for new construction; 1 for pre-existing, 3-classroom block. Additional teachers' salaries paid for by community/FTC.

^c 250 households establishing clothes lines, dish racks, rubbish pits, hand-washing stations and boiling water skills ('7 healthy habits').

^d 113 girls and 128 boys most recently reported to have participated in water, sanitation and hygiene (WASH) workshops. 40 children specifically form a school-based health club and serve as peer health educators.

^e 2 youth groups also formed.

^f Beneficiaries decreased because some women weren't able to commit the time needed.

FTC actively re-engaging women who don't complete programme to encourage them to continue.

Table 10 – Ngosuari Kenya performance results

| | Target for 2014 | Autumn 2011 | Spring 2012 |
|---|--|-------------------------------|-------------------------------|
| EDUCATION | | | |
| Students regularly attending school (from a baseline of 408 in 2011) | N/A ^a | 408 (243 boys + 165 girls) | 417 (266 boys + 151 girls) |
| Classrooms built/outfitting with equipment and textbooks etc. | 5 | – | 1 |
| | | | |
| Teachers Salaries paid by government | N/A ^a | 14 ^b 10 | 14 10 |
| WATER | | | |
| Hand-washing stations built | 4 | – | – |
| Latrine blocks built (1 block consisting of 2 latrines) | 6 | – | – |
| Clean water system | 1 | – | – |
| HEALTHCARE & ENVIRONMENT | | | |
| Monthly mobile healthcare clinics and workshops. 250 households establishing clothes lines, dish racks, rubbish pits, hand-washing stations and boiling water skills ('7 healthy habits') | Target number is 12 x 3 years = 36 visits | – | Target achieved |
| De worming sessions for all students | 4 x twice a year | achieved | achieved |
| Alternative Income | | | |
| Women's groups started | 5 | 3 | 3 |
| Women regularly attending each session | 10-15 | 10 | 15 |
| Average yearly income | N/A | £47 | £70 |

^a School attendance and teacher levels are currently good

^b Additional teachers' salaries paid for by community/FTC. 9 male and 4 female teachers.

^c 60 women participated in first training session introducing the concept of merry-go-rounds resulting in 3 groups forming. Average of 15 women in each of these groups subsequently participated in continued training and capacity-building – i.e. not all 60 women from first training have currently joined a group.

Table 11 – Udawad India performance results

| | Target for 2014 | 2011 | Spring 2012 |
|--|------------------|---|--|
| EDUCATION | | | |
| Students regularly attending school (from a baseline of between 40 and 50 in Spring 2010) | 85 ^a | 65 (40 boys +25 girls); 50 in Spring ^a | 65 (40 boys +25 girls); 50 in Spring (31 boys + 19 girls) ^a |
| Classrooms built/outfitted with equipment and textbooks etc. (2 blocks consisting of 2 classrooms = 4 classrooms in total) | 4 | 2 already achieved | 2 already achieved |
| Teachers (Salaries paid by government) | 4 | 1 male 1 female | 1 male 1 female |
| WATER | | | |
| Hand-washing stations, latrines blocks built, hand pump water system, clean water storage tanks | - | - | Planned for winter 2012 |
| HEALTHCARE | | | |
| Health Centre constructed | 1 | 1 target achieved | 1 target already achieved |
| Staff employed by government | - | 3 | 3 |
| Beneficiaries | 138 households | 46 | 138 |
| Children in day care | 138 households | 24 | 23 |
| Females receiving antenatal care | 138 households | 12 | 8 |
| Females receiving postnatal care | 138 households | 10 | 14 |
| Deworming session held | 1 x twice a year | 1 target achieved | 1 target achieved |
| Mobile health camps | 10 | 4 achieved | 6 (target of 10 therefore achieved) |
| Health promotion health visits | 1 | 1 target achieved | 1 target achieved |
| ALTERNATIVE INCOME | | | |
| Community/kitchen gardens | 1 | 1 target achieved | 1 target already achieved |
| People maintaining gardens | 10-15 | 5-10 | 5-10 |
| People benefiting from gardens | 138 households | 20 households | 81 households |

^a Fewer students attend school in the spring term than in the winter, due to seasonal migration. This issue is being addressed and when the community can earn an income from farming all year round this will help ease the seasonal migration.

Table 12 – Kamoda India performance results

| | Target for 2015 | Spring 2012 |
|--|--|---|
| EDUCATION | | |
| Students regularly attending school (from a baseline of 40 in 2011) | 153 | 40 (20 boys + 20 girls) |
| Classrooms built, furnished and outfitted – 2 blocks (with 2 classrooms) | 2 | 1 achieved |
| Teachers – Salaries paid for by government | 4 | 2 |
| HEALTHCARE | | |
| Health Centre constructed | 1 | 1 target achieved |
| Staff employed by government | 3 | 3 target achieved |
| Beneficiaries | 130 households | 108 |
| Children in day care in the anganwadi | N/A ^a | 10 |
| Females receiving pre/postnatal care | Target not yet set | 26 |
| Children receiving vaccinations/deworming | School population plus children at the anganwadi | 23 |
| Women receiving healthcare workshop | N/A ^b | 25 |
| ALTERNATIVE INCOME | | |
| Women's groups started | 130 households | 2 |
| Women attending each session | 10-15 | 22 (total currently attending the 2 groups) |

^a No target as attendance will fluctuate based on the number of mothers receiving maternal health care services at the clinic and whether they already have young children who require the service.

^b This will depend on the number of women using anganwadi

And finally...

Don't forget we're keen to receive feedback so if you have any ideas or suggestions please contact us by e-mailing **environment@fly.virgin.com** or **community.investment@fly.virgin.com**

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