virgin atlantic

sustainability report

Winter 2011/2012

It's hard to believe it's been more than a year since we published our last brief sustainability report. A lot's happened in those months and we hope you'll find this report a good way to find out about our progress, as well as what you can look forward to hearing about in reports to come.

There's no getting away from the fact that aviation impacts on the environment, so we're doing what we can to promote sustainable solutions for our business and the wider industry. The next few pages detail the steps we're taking to improve our environmental

performance across a range of areas, as well as to drive sustainable development in our destinations through our community investment work. We believe in a sustainable future for aviation, and whilst there's still a lot to do, we've made some great progress so far.



"We're proud to be putting sustainability at the heart of our business. The last year has been an exciting time for us, with the arrival of the first of our new, more fuel-efficient aircraft – the Airbus A330s – which will shave up to 15% per seat off our fuel and carbon emissions compared to the aircraft they are replacing. We also don't forget what happens on the ground and have recently replaced our car and commercial vehicle fleets with more fuel efficient options. Actions like this are vital in helping us make progress towards our environmental targets, and signal our commitment to our passengers and staff to be a world leader in sustainable aviation."

Julie Southern, Virgin Atlantic CCO

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Aviation is a truly global business, where airlines from around the world operate and compete on the same routes. We believe that to ensure a sustainable future for aviation, the industry needs to work together. 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, so that our own, independent initiatives don't simply shift problems sideways to other airlines or regions.

That's why we helped to set up a number of active industry groups such as Sustainable Aviation www.sustainableaviation.co.uk, Sustainable Aviation Fuel Users Group (SAFUG) www.safug.org and Aviation Global Deal (AGD) www.agdgroup.org).



Virgin Atlantic Destinations Map

Collaborative, cross-industry work 何





Sustainable Aviation (SA)

A world first, Sustainable Aviation (SA) was launched in 2005 and brings together UK airlines, airports, engine and airframe manufacturers and Air Traffic Management (ATM) to find industry solutions to the aviation sustainability challenge through the cooperation and collaboration of all parts of the industry. SA is unique in the transport sector: there is no equivalent in road, rail or shipping. An independent Stakeholder Panel monitors SA's progress and works with the SA Council to ensure that relevant priorities and challenges are tackled.

In March 2011, speaking in her capacity as Chair of Sustainable Aviation, Jill Brady, Virgin Atlantic's Director of HR and External Affairs, launched the Sustainable Aviation's 2011 progress report.

"Despite the most challenging couple of years in the industry that I can remember, members' commitment to Sustainable Aviation has not wavered. Real progress has been

made in many areas, not least in the management of aircraft waste and local air quality, identifying and proving new sustainable fuels, initiatives in air traffic management and airport procedures, and in offering a realistic assessment of the inter-dependencies between noise, carbon and local air quality."

The report is an interesting read. Please go to: www.sustainableaviation. co.uk/2011/progressreport-2011 to check it out.



Sustainable Aviation Fuel Users Group (SAFUG)

In 2008, we got the biofuelball 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 want to make sure our industry avoids the unintended consequences associated with earlier generations of biofuels and is ready and able to use sustainable fuels as their production is scaled up.

We are a founding member of SAFUG, through which

member airlines pledge their commitment to the sustainability of fuels www.safug.org/information/ pledge and support the sustainability principles of the international, multistakeholder initiative, the Roundtable on Sustainable Biofuels RSB -

http://rsb.epfl.ch.

There are 23 airline SAFUG members now, accounting for about 25% of the world's aviation fuel demand.



Carbon War Room (CWR) In a further excitina

development, we've recently teamed up with the Carbon War Room (CWR). The CWR is an independent, global, non-profit organisation, which harnesses the power of entrepreneurs to unlock gigaton-scale, market-driven solutions to climate change. Over 50% of the climate change challenge can be addressed today - and profitably - under existing policy and technology conditions. CWR seeks to accelerate the flow of capital to entrepreneurial climate solutions that make economic sense, right now. For more see: www.carbonwarroom.com

partner on their 'Aviation and Renewable Fuel Operation'. CWR's overall objective is to dramatically reduce green house gas emissions from the aviation sector, making it a cleaner, more profitable industry, less susceptible to fuel price volatility and high oil prices. CWR is actively seeking and aligning key stakeholders - including investors, sustainable fuel producers, feedstock suppliers, technology providers, fuel buyers (airlines), airport authorities, regulatory agencies, non-profits, and others - to accelerate sustainable jet fuels' path to market, and enhance their ability to scale up to meet industry demands. They've recently evaluated sustainable fuel suppliers worldwide, on the wide range of commercial and sustainability criteria that are important to airline buyers like us. The results of their evaluation feature on a newly launched website www.RenewableJetFuels.org - which is the world's first worldwide, public market analysis of sustainable aviation fuels. We're pleased to say that LanzaTech, our low carbon fuel supplier, scored the maximum three stars in each category.

We've joined CWR as a

European Union Emissions Trading System (EU ETS) and Aviation Global Deal (AGD)



2012 marks the first year that aviation will be included in the EU Emissions Trading System.

We are providing robust data on our carbon emissions and complying with this carbon cap and trade scheme for European aviation, which means paying for our carbon emissions by tonne, above a certain limit set by the 2004-2006 baseline year. As a founding member of

AviationGlobalDealGroup

Aviation Global Deal (http://www.agdgroup.org), we're campaigning for an effective carbon cap and trade scheme for the whole industry, worldwide. Cap and trade is known to be an environmentally-effective, market based measure (MBM) for reducing carbon emissions – whereby fuel efficiencies are further incentivised and

the funds collected can be used for both climate change mitigation (reducing green house gas emissions) and adaptation schemes (helping countries to adapt to the rigours of climate change, particularly developing countries). Cap and trade is much more environmentally effective and cost efficient than simple taxation matters. The latter are much less effective in achieving carbon reductions and funds tend to

be used in general national government accounts, rather than for carbon reduction initiatives. The global cap and trade approach relies heavily on worldwide carriers and governments to agree to the principles to deliver such a scheme, and we are actively encouraging them to seek a solution, in line with recent discussions at the United Nations Climate Change Conference (COP 17) in Durban in December 2011.

Role of governments



As well as the industry initiatives that we can drive forward, we rely very much on governments to develop a supportive policy environment, for example in encouraging the right kind of sustainable fuels market. For example, at the moment credits for using biofuels under EU ETS rely on a 'point of use' system, which is almost impossible to administrate - since fuel at airports is co-mingled and shared between carriers,

the existing infrastructure doesn't allow us to track exactly how much sustainable fuel we have used on our own aircraft. Instead we need a 'book and claim' system similar to that used in the ground renewable electricity market, to reward those airlines purchasing truly sustainable fuels.

Aircraft fuel is one of our biggest expenses and the sustainable fuels currently available are much more expensive than kerosene. We'd therefore also like to see governments de-risking this expensive early commercialisation phase by providing financial incentives to investors, suppliers and buyers. Development of this new market offers additional benefits, since sustainable fuels are essential for greening the economy as a whole, not just the aviation sector.

We're focusing on four key areas across our business operations, which we set out in more detail below:

Carbon

Vaste.





Purchasing 🔇



Community Investment 🔞



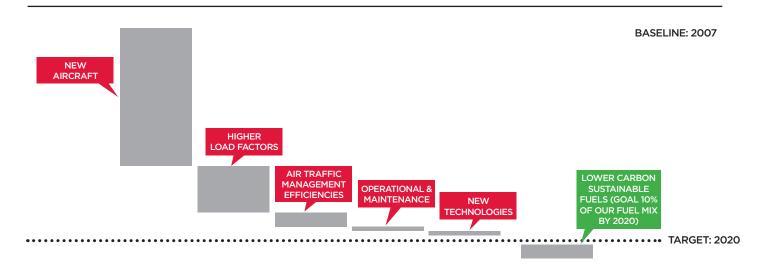
on footprint @

In 2010, we calculated our Scope 1 (the direct emissions from our aircraft and ground transport fuel) and Scope 2 (our ground energy use) carbon footprint to be a total of 4.475 million tonnes. More than 99% of this (4.463) million tonnes) was from aircraft fuel consumption. The 2010 figure represents a 13% reduction from 2007 - and while it's great to see our emissions going in the right direction, we're aware that some of these savings may have resulted from a combination of the economic downturn and unanticipated events like the volcanic ash airspace closures and snow disruption in 2010.

To measure our aircraft fuel carbon reductions in the most meaningful way, we calculate our carbon intensity by dividing the amount of fuel our aircraft burn by the number of tonnes of passengers and cargo each flown 1km (known as revenue tonne kilometres, or RTKs) a standard aviation measure of efficiency.



We are aiming for 30% reductions by 2020 how will we get there?



In 2007 we set ourselves an ambitious target of a 30% reduction in CO₂ by RTKs between 2007 and 2020. It's a big target but here's our plan for how we'll get there.

Carbon reduction measures



What's done?

What's next?

New aircraft

On 2nd April 2011, the first of our new Airbus A330-300 aircraft took its inaugural flight between Manchester and Orlando. The A330 is a long range twin-engine aircraft and is the most efficient in its class today. These aircraft are at least 9% more efficient on a per-trip basis than the aircraft they will replace, and 15% more efficient on a per seat basis.

We've already welcomed our second A330-300 into our fleet and look forward to welcoming more in the coming months. We've also ordered Boeing 787-9 'Dreamliner' aircraft, which should start to enter our fleet from 2014. These aircraft are on average 25% more fuel efficient than similar-sized aircraft in our current fleet, and about 27% more efficient on a per seat basis .

Load Factors

Ensuring our flights have a maximum number of seats filled with passengers maximises our fuel efficiency and reduces per passenger carbon emissions, as well as making good business sense. Our average load factor for the financial year to Feb 2011 was 81.7%, which is pretty good going in industry terms especially when the 200,000+ tonnes of cargo carried in the bellyhold is also taken into account.

Through tactical deployment of new aircraft in our fleet (i.e. ensuring we use the right aircraft for each route), we will continue to maximise our load factors.

Air Traffic Management (ATM) Efficiencies

We're active members of Sustainable Aviation's Operational Improvements Group. This group looks at all operational aspects of flying including ATM. The group led by NATS has undertaken some pioneering work looking at the idea of the Perfect Flight - whereby optimal ATM efficiencies are put in place. A trial flight took place last year and a video demonstrating the principles can be seen at - www.virgin-atlantic.com/changeisintheair/diary.

Perhaps surprisingly, aircraft do not tend to fly in a straight – and therefore most fuel efficient – line. We have to negotiate, and so effectively zigzag, through many different airspaces. Initiatives like Single European Sky (SES) – www.eurocontrol.int/content/single-sky-europe, which will allow aircraft to follow more direct, quicker and less carbon intensive routings, are essential to reducing emissions. Through the Association of European Airlines (www.aea. be) we're united with the rest of the European industry in supporting the SES initiative, and encouraging national governments to work with their air navigation service providers to take this valuable initiative forward.

Operations and maintenance

Whilst it may look like a small wedge of our 30% reduction target, operational and maintenance improvements is one of the areas under our direct control where we can continue to make improvements. Our cross-departmental 'Fuel Panel' group covers a number of aircraft issues such as: encouraging more efficient flying techniques and procedures; regular cleaning (to reduce drag); procuring lighter weight aircraft interiors and otherwise reducing excess onboard weight; encouraging airports to reduce ground taxiing times and improving the availability of fixed electrical power (rather than relying on units powered by aircraft fuel to provide ground power).

The Fuel Panel was set up in early 2005 and since then has reviewed and implemented a number of efficiency initiatives. The panel's key initiative for this year is the implementation of a fuel management system, which will help us identify and evaluate the effectiveness of new initiatives as well as keep track on existing ones. We hope to have a new system in place by early 2012.

New technologies for current fleet

We've investigated and introduced a number of technological improvements, such as modified turbine blades. With the help of Rolls Royce, who make the Trent 500 engines fitted to our A340-600s, we have improved our fuel consumption by 1%, through an enhanced performance modification package.

Innovation is the way forward. With the Carbon War Room, we will explore opportunities for identifying and retrofitting fuel efficient technologies to our aircraft.

Progress towards our target



While fuel consumption sometimes varies month to month, you can see from the graph below that we are generally heading in the right direction. In fact overall, we were more efficient in the first 10 months of 2011 compared to the same 10 months in 2010. This is at least in part due to more efficient fuel burn, following the introduction of A330s this year.

With further aircraft deliveries expected in 2012, these savings will continue. Following that, our next big chunk of fuel and carbon savings will come from the introduction of the new Boeing 787s (see Carbon Reduction Measures Table). We expect to start to receive these aircraft in 2014.

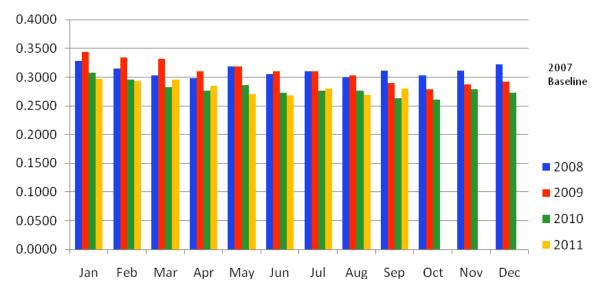


Figure: Fuel burn by RTKs

The role of next generation, more sustainable aviation fuel





Richard Branson and members of the team for our biofuel test flight in 2008

First and foremost, fuel efficiency is a major focus in reducing both our demand for fuel and our carbon emissions. Along with this drive for reduced fuel consumption, and campaigning for a global cap and trade scheme for aviation, we see low carbon fuels as a central

part of pursuing our low carbon strategy.

Because changes in aircraft airframe and engine technology have such long lead-in times, and because of the complex and costly worldwide infrastructure that supports the industry, aviation will need a 'drop in' liquid form of energy to power aircraft for the foreseeable future. Low carbon fuels offer one of the most realistic ways to achieve significant carbon reductions, at least in the short to medium term. This is why we have been pursuing sustainable aviation fuels for some time.

On 24 February 2008, Virgin Atlantic was the first airline in the world to operate a commercial aircraft on a biofuel blend. The Boeing 747 flew a short flight from London to Amsterdam, using a 20:80 biofuel to kerosene blend in one of its four engines - a combination of coconut oil and babassu nut oil (both sustainably cultivated crops). Whilst we didn't expect the biofuel we used for our demo flight to be used by

the industry long-term, we wanted to show that it was technically possible to fly an aircraft with biofuel, as well as to make a visible demonstration of our commitment to find a sustainable alternative to traditional crude-oil based kerosene. At that point, we proved to a largely sceptical industry that it was possible to replicate the very strict performance and safety characteristics of normal iet fuel.

In the three years since this first flight, we've been working hard to support the development of rigorous sustainability principles for aviation biofuels (see SAFUG and RSB above), as well as developing solid foundations for the next phase of our lower carbon fuels programme.

Revolutionary low-carbon jet fuel (CO)

On 11th October 2011, at Battersea Power Station, London, we were delighted to announce our partnership with fuel company LanzaTech, to develop the first of the next generation low-carbon fuels. Through a unique process of fermentation (much like that of brewing beer), LanzaTech's patented technology uses a microbe to convert waste carbon monoxide (CO) gases from steel mills into ethanol, an alcohol. The alcohol is then converted to jet fuel through a second stage process, using technology from Swedish Biofuels. In short, this world first, breakthrough, fuel production process recycles the carbon in the waste gases, which would otherwise be flared off direct to the atmosphere as carbon dioxide (CO₂). Detailed life



From left to right: Jennifer Holmgren, CEO of LanzaTech, Richard Branson, President of Virgin Atlantic and Steve Ridgway, CEO of Virgin Atlantic, announce our partnership

cycle analyses have shown that this fuel will have roughly half the total life cycle carbon content compared to kerosene. LanzaTech estimates that its process can apply to 65% of the world's steel mills, offering the potential for the fuel to be rolled out for worldwide

commercial use. If the technology were applied to all these steel mills, that could provide 19% of the world's current jet fuel demand.

Work is still needed to see the technology through to commercial use in our aircraft, and we hope to have a demo flight using the new fuel within 12 - 18 months, working with LanzaTech, Swedish Biofuels, Boeing, engine manufacturers and others on the technical. ASTM International fuel approval process. We are also working closely with the Roundtable on Sustainable Biofuels (RSB) and Imperial College London to ensure we pursue the best sustainability profile possible for this new fuel.

We plan to use the new fuel in 2014, on routes from Shanghai to London Heathrow as LanzaTech develop facilities in China, with plans for India not far behind. Discussions to introduce the fuel technology to other locations are taking place throughout Europe, including in the UK.

Offsetting





Heat and power generated from biomass in Karnataka, India

Our efforts are focused on reducing emissions at the source and finding new and innovative ways of improving the fuel and carbon efficiency of our fleet and operations. Our main carbon savings are likely to be around new aircraft, operational efficiencies and sustainable fuels solutions.

However, we also think it's important to offer our passengers the opportunity to offset the emissions associated with their journeys in the most meaningful way possible. We have calculated the exact emissions for each of our planes, on each route, and have had this independently verified. We have worked out how much passengers in each class should pay based on the different seat allocations, so

they can offset the amount of CO₂ equivalent to their specific flight. Our Gold Standard offset scheme is provided by myclimate a Swiss based charity that uses contributions to fund clean energy solutions, especially those which help communities in developing countries. For example in India we support a project where a power plant turns

farming waste like sugar cane into electricity for the local community, with the process also producing ash that the local farmers can use as fertiliser for their crops.

Endorsed by 47 NGOs worldwide including many environmental groups, Gold Standard methodology was created to encourage a shift from fossil fuel based economies to sustainable energy and fuels. This means passenger money goes directly to projects that have a positive impact on both the environment and people's lives. Passengers can take advantage of our carbon offset facility, both onboard and at the point of ticket purchase. To find out more about our offset programme, visit:

www.virgin-atlantic.com/ en/us/bookflightsandmore/ carbonoffset/index.jsp.

Staying grounded 😡



Our London Gatwick Clubhouse

The main part of our carbon emissions comes from flying our aircraft, but we're also keen to address the impacts of our ground operations in our various properties – from offices to Upper Class Lounges, from aircraft hangars to warehouses. Some of these we manage ourselves here in the UK or internationally; others are controlled externally, by airport operators, contractors or property landlords. However, most of our 8,564 employees are UK-based – with around half

being pilots and cabin crew and the other half ground based. For this reason, we've focussed our activities in the UK.

In 2007, The Carbon Trust (CT) and Environ reviewed and reported to us the measurable carbon emissions of our UK ground based activities (buildings energy, company vehicles, staff business travel and commuting).



Staff travel 0

The 2007 CT and Environ review calculated that of the 31,000 tonnes CO_2 emissions from our ground operations, 42% came from staff travel to and from work, and a further 21% from business travel. We have an ongoing programme to continue to reduce these emissions, including a cycle-towork-scheme and staff discounts and advice for those who commute to work.

New fleet 👩

Whilst we were picking up the keys to our new aircraft we were also welcoming in a new set of cars and commercial vehicles. In 2009 we worked with the Energy Savings Trust to carry out a review of our ground vehicles fleet to identify if any fuel efficiency improvements could be made. Following

this we carried out an extensive testing programme of 29 different models of cars and 32 different models of vans to assess which were most suitable for our use and the most fuel efficient. Switching vehicles to lower carbon options means we'll save 1,097 tonnes of CO₂ over a four-year period.



One of our latest more fuel efficient Blue Motion Volkswagen Golf ground vehicles: part of a series of fleet changes contributing to a 25% reduction in emissions across the fleet.

Energy @

Our target is to reduce our ground energy consumption from 2008 levels, by 10% by 2012 and 20% by 2020. To work in line with our reporting obligations under the CRC Energy Efficiency Scheme, we amended our original baseline reporting year from January to December 2008 to 1 April 2008 to 31 March 2009.

How are we getting on?

Unfortunately, not as well as we would like! However, like other businesses, we need to take into account a number of variables when evaluating energy consumption - such as changes in staffing levels and seasonal variations. We occupy a number of properties in the UK, from warehouses, to training facilities, from offices to hangars. The past two years have seen us go through a number of changes: we have gained a new call centre in

Swansea, and new offices in Brackley, while at the same time vacating disused warehouses and offices near our headquarters in Crawley. Therefore, the energy consumed in 2008-2009 was for different buildings to those in 2010-2011. Fluctuating staff numbers and changes in seasonal temperature have also affected our energy demand. Two of our two biggest facilities, our HQ 'The Office' and nearby offices and training facility 'The Base'

host most of our employees. They have the most consistent data, with staff numbers, building size and function staying reasonably consistent year to year. The results below demonstrate that while The Base is showing the desired reductions in energy used, The Office experienced a 3.83% increase on that consumed in 2008-2009.

The data below includes all sites for which VAA are

responsible for reporting on as part of our CRC compliance. This includes those occupied by our wider travel group, such as Virgin Holidays. In addition, "All Sites" includes the electricity consumption from our hangars, which the relevant airports submit as part of their CRC submissions. We have included this additional data as ultimately we are responsible for the energy consumption at these sites.

	2008 - 2009	2009-2010		2010 - 2011	
		kWh	% change from 2008 base year	kWh	% change from 2008 base year
All Sites	36,755,785.73	36,106,221.67	-1.77%	38,073,443.00	3.58%
The Office	11,811,952.20	11,240,545.00	-4.84%	12,264,687.20	3.83%
The Base	8,783,073.60	7,779,371.00	-11.43%	7,990,871.70	-9.02%

What have we been doing?

We've undertaken a range of different initiatives to reduce our energy use, including:

- ▶ Building Management System (BMS) modifications;
- Purchasing energy efficient white goods as standard;
- ▶ Putting switcher systems on doors in hangers so the heating switches off when the doors are open;
- ► Installing energy efficient lighting and re-configuring lighting systems;
- Replacing kettles with water boilers;
- Engaging staff in switching off what's not in use.



We have been taking a number of steps to reduce our energy consumption. For example, in the past year we have removed 444 unnecessary light fittings from our Head Office (The Office) and our training facility (The Base). This will save in excess of 72,460 kWh electricity per annum – equivalent to powering about 16 average domestic homes for a year. We will continue to validate the lighting in our UK offices. The initial results can already be seen – a year after work started electricity consumption has fallen at The Office when comparing the same months, like for like, eg May 2011 used 8% less electricity than May 2010 and July 2011 used 17% less than July 2010.

We're also currently installing 'motor inverters' in our larger buildings. These improve the efficiency of heating and cooling pumps and fans, reducing energy consumption, prolonging the life of the equipment and reducing frequency of replacements. We're investigating other efficiency projects, including 'voltage optimisation', an energy-saving technique that reduces the electricity voltage supplied to a site in order to avoid unnecessary power being provided to equipment. The lifetime of equipment is also extended (because it generally runs cooler at the reduced voltage), with a consequent reduction in maintenance costs.

Buying renewable energy

We're proud to say we've been buying green electricity for a number of years. 99% of our current UK electricity comes from a mixture of renewable sources (such as wind, hydro, solar, tidal, wave and geothermal).

Waste @

Our main priority is to reduce the amount of waste we generate in the first place. We're doing this through a series of internal campaigns and initiatives – getting different departments involved in sourcing and designing products that use fewer materials, can be reused or recycled, have longer life-spans, or are from renewable sources.



Source: WRAP / Envirowise

After reductions, we are focused on reusing, recycling, creating energy from waste, and otherwise avoiding the use of landfill sites.

In 2007, we came up with the following targets:

- 50% of the waste generated by the end of a flight will either be recycled or reused by 2012.
- 50% of waste from our ground operations will be recycled or reused by 2012.

As an airline, with air and ground operations with multiple sites, we have incredibly varied waste streams, which present us with a number of interesting challenges.

Over the last few years we have recycled everything from aircraft lavatories to betamax tapes, industrial ice-cream freezers to pairs of socks. Waste from our UK offices and staff restaurants is relatively easy to deal with, whereas off-aircraft waste managed by airport authorities and a range of contractors in other countries is not so straightforward, as we explain below. The nature of some waste also presents its own difficulties.

Since setting our original targets in 2007, it's fair to say we have developed a clearer picture of the challenge we face. As a result we're having a new look at how we set meaningful targets, as well as how we manage and monitor our waste.











Ground waste

Our UK facilities represent by far the greatest proportion of our ground operations - and are largely managed by us - so this is where we have focused most of our attention. In 2007, we changed contractors, meaning we started to get much more reliable data on the tonnage and nature of our waste streams from June 2007 onwards, as well as achieving better recycling rates. As we have complete data from 2008, we are now using 2008 as our baseline year, allowing us to make direct comparisons from year to year, going forward. We now have new more ambitious targets for Virgin Atlantic-managed UK sites:

- To reduce the total amount of waste we produce by 50% from 2008 to 2012.
- To recycle or reuse (or otherwise divert from landfill) 75% of waste generated by Virgin Atlantic-managed UK sites by 2012 (we raised this from 50% as we want to be more ambitious).



Following an enhancement in the data collection methods of our waste provider in 2011, we are now able to record and calculate Virgin Atlantic's waste figures in a much more reliable way – based on the numbers of bins lifted and our waste contractors own global industry standards for the volumes of waste various waste streams typically contain. (Prior to October 2011 our waste data was estimated manually.)

This new approach has allowed us to backdate and apply this methodology to more accurately report our data in a consistent manner.

What have we done so far on reductions?

Between 2008 and 2010 we have reduced our waste by an average of 348 tonnes – a reduction of 33%. We are

currently working hard to increase this to our target of 50% by 2012.

We understand that reducing our waste is a significant part of any waste strategy, since less waste generated means less resources used in the extraction, manufacturing, transporting and disposal of materials and products, so we're very pleased with this result.

Our second target is to recycle 75% of our total waste by 2012. By the end of 2010 we had recycled 53% (an estimated 369 tonnes from 692 tonnes). Hard work in 2011 (for example through our Less to Landfill campaign) has seen this figure significantly increase and already by October 2011, we are currently recycling 68% of our waste stream – suggesting we're due a very promising end of year result!

	2008 tonnes / % of the annual total	2009 tonnes / % of the annual total	2010 tonnes / % of the annual total
Total waste	1040	706	692 (33% reduction since 2008)
Total recycled /re-used	422 / 40%	304 / 43%	369 / 53%
Total to landfill	618 / 60%	402 / 57%	323 / 47%



Sustainability and design

We are proud of our working environment, which reflects both the style and forward thinking of Virgin Atlantic and our staff.

To reduce the amount of future waste, we test potential fabrics, floorings, carpets and furniture so we can advise designers on the most sustainable materials, which will last longer, reducing the need for frequent replacements and chemical cleaning.

Central stationery pool

A shiny new folder may look pretty, but here at Virgin Atlantic we are keen to look after and re-use as much of our stationery as possible. At our warehouse we have a central stationery pool, collecting together and re-distributing all types of stationery, enabling our staff to reuse as much as possible without having to order new stuff.



Other improvements include:

- In our offices we're switching to duplex printing as standard across all our printers.
- Milk pergals have enabled us to save 14,814 milk bottles from the waste stream in the last year.
- At our staff restaurants, we provide re-usable crockery and cutlery as standard for pretty much everything, except coffee cups (we offer a discount to our staff who request re-usable cups, instead of disposable ones).
- In our Gatwick and Heathrow Clubhouses we provide washable bamboo hand-towels instead of paper ones. In the past year this has saved 1,379,700 paper hand towels from entering our waste stream. (If you were to lay these down, end to end, they would cover over 180 miles, the distance between London Heathrow and Manchester Airport!)

What have we done so far on recycling?

Dry Mixed Recycling (DMR)

Major changes have taken place at our Crawley head offices over the past two years. General waste office bins have been reduced in numbers and halved in size. We have worked alongside our waste contractor to minimise collections, reflecting the reduction in office landfill waste being generated. Staff have supported this change and we have experienced a significant increase in the

amount of waste we now recycle. We are currently looking to roll out this initiative to the rest of our UK sites.

At Virgin we like to think outside the (cardboard) box. We are continually looking at our waste streams and investigating more sustainable ways to reduce, reuse and recycle the products and materials we use. Examples include:



Furniture recycling

In 2010 we recycled 28 tonnes of furniture. By August 2011 we had already exceeded last year's total, having recycled a further 37 tonnes of furniture.

Other products currently being recycled include:

carpets, electrical goods, foam from our aircraft seats, clothing (profits from which are donated to our chosen charity Free The Children) and green waste, which is sent away to be composted.

Recognition



Virgin Atlantic staff are presented with the Gatwick Diamond Business Award for Recycling (L-R Cindy Kyle, Contracts Development Manager; Izak Holtzhausen, Housekeeping Spervisor; Ruth Matthew, Business Sustainability Executive; Mel Weymes, Contracts Manager; Sir Trevor McDonald; Chantal Owen, Clubhouse Duty Manager; Louisa Holbrook, Sustainability Development Executive).

It's been said that it's the people who make Virgin Atlantic what it is. That's particularly true when we talk about sustainability. From designing and championing new lighter weight and more sustainable products, to devising new recycling schemes, our staff's initiative and hard work enables us to make progress towards our sustainability targets.

A great example of this is Mel Weymes, Facilities

Contracts Manager, who was presented with the Change is in the Air Environment Award at our recent Virgin Atlantic Heroes' Awards evening. This award recognised the incredible hard work Mel has put in to reducing ground waste and increasing our recycling rates over recent years. Mel also went on to win a Virgin Stars award, which recognises employees' achievements across the Virgin companies.

In October 2010, we were pleased to be shortlisted for the British Institute of Facilities Management Sustainability Award. The judges were looking for practical implementation of socially, environmentally and economically sustainable practices in our facilities management work with our staff restaurant caterers Baxter Storey, to reduce our waste levels and increase recycling rates. Our efforts impressed the judges enough for us to be placed in the final three.

We did even better in the 2011 Gatwick Diamond Business Awards as Winner of the Green Business Awards for Recycling - here's what the judges had to say: "The nature of this business requires the organisation to be environmentally responsible. They aren't just doing what is required; instead, they are striving forwards and performing beyond expectations.

In line with the ethos 'Reduce, Reuse and Recycle', they are leading the way with regards to exploring and implementing innovative ways to recycle a wide range of items and multitude of commodities."



Mel Weymes is presented with Richard Branson's Special Award for the Environment.

Off-aircraft waste

It's a bit trickier on our aircraft. For a start, European waste regulations on disease control make it impossible to recycle disposable items arriving in the UK from outside the EU, which have been in contact with any meat or dairy products (referred to in the industry as 'Category 1' or 'Cat 1' waste). Instead they have to be incinerated or deep landfilled – meaning we can't recycle as much as we'd like to.

For example, even a sandwich wrapper mistakenly put in the wrong waste stream onboard could result in a fine and all the associated waste being treated as Cat 1 to be sent to incineration or deep landfill.

To make things more complicated, most of our waste is handled by third parties like airport authorities, cleaning and catering companies, so we rely on their waste management systems. And because waste from a number of different airlines tends to go through the same channels, it's currently impossible for us to get our own waste tonnage data from these other organisations, meaning we're currently unable to report accurate waste data.

The table below summarises the data we have for Heathrow (LHR), Manchester (MAN) and Gatwick (LGW) - or are able to estimate - from various sources. In the coming months and years we will be doing more to push our industry partners for better waste data, from our main airport hubs in the UK; as well as - in the longer term - international airports.

Heathrow, Gatwick and Manchester off-aircraft waste estimated tonnages

	2008 total tonnage (% of annual total)	2009 tonnage (% of annual total)	2010 tonnage (% of annual total)	Tonnage (%) change 2009-2010
1. Catering waste				
1a. Catering waste re-used /recycled	No data available	342 (10%)	386 (12%)	44 (13%)
1b. Catering waste incinerated	No data available	2,935 (90%)	2,950 (88%)	15 (0.5%)
1c. Catering waste – total tonnage	No data available	3,278 (100%)	3,336 (100%)	58 (1.8%)
2. MNH partner waste (see below)	2008 total tonnage	2009 tonnage	2010 tonnage	Tonnage (%) change 2008-2010
2a. Textiles /amenity kits re-used/recycled	236	162	165	-71 (-30%)
2b. Other recycled e.g. headsets, pillowcases etc.	370	358	445	75 (20%)
3. Passenger waste	2008 total tonnage	2009 total tonnage	2010 total tonnage	
3. Passenger/crew cabin waste (PCW) i.e. bottles, cans, newspapers incinerated (Energy from Waste)	2428*	2428*	2428*	N/A

^{* =} total tonnage, estimated from previous audits

On board, our food and drink disposable products represent a large part of our waste, so a simple solution might seem to be to use more rotable (re-useable) catering equipment options. But disposable items are generally lower in weight,

which means they are better for aircraft fuel efficiency and carbon emissions, often making them the preferred choice. We are currently undertaking a range of carbon analyses to evaluate the total lifecycle impacts of the rotable versus

disposable items we use – balancing the materials used, manufactured, transported and disposed of in different items, with the jet fuel burnt in transporting them around during their lifetime.

Innovative partners

One thing we can do is to try to reduce the amount of waste we produce in the first place, and to recycle the items we can, that are not associated with food and the Cat 1 issue. To do this, we're lucky to work with some really innovative partners, such as MNH, LMB and Old Threads.



MNH

MNH Cabin Services helped us divert 610 tonnes of cabin waste from landfill in 2010 by reconditioning and recycling a range of items, including:

- broken headsets (the sponges are 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);
- socks are shredded and used for providing insulation materials;
- CDs are used in traffic light lenses.

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



LMB

We reuse and recycle everything from our red crew uniforms, including the buttons! Buttons are re-issued as spares, and cut garments are sent to our recycling partners, LMB. Any non-security-sensitive garments are taken by LMB and distributed overseas (in Africa and Europe) where they are refurbished (shoes polished, etc) and sold by local traders in market stalls - providing them with an income. Other items are recycled for purposes such as industrial wipes, mattress stuffings, or shredded to make new yarn for manufacture. Since January 2011 LMB have collected 10.7 tonnes of clothing and shoes from Virgin for reuse or recycling.

http://www.lmb.co.uk



Old Threads

Old Threads are two busy mums with backgrounds in fine art and illustration who design and make beautiful toddler quilts using recycled and sustainable materials.

But they don't just use any old recycled fabric - their

amazing products are made from our old upper class duvet covers. Once they've checked, washed and unpicked every piece, they handprint their items with limited edition artwork, using non-toxic, low-impact dyes. Take a peek at their website. www.oldthreads.com



Water

Our 2007 water target was to make a 10% reduction in our water use by 2012, at Virgin Atlantic controlled sites around the world. Unfortunately, in retrospect, this was a case of enthusiasm over experience, since we're not able to retrieve water data from our worldwide destinations, as most of the sites we used are not directly

managed by us and are shared with other parties. So it makes more sense to report on our UK operations, where the vast majority of our water-use activities are. We are working on collecting better information at our Virgin Atlantic managed sites in the UK and hope to have data to report next time.



Purchasing ®



Guarantees
a **better deal**for Third World
Producers

Virgin Atlantic has already taken significant steps in improving sustainability practices in relation to our supply chain – from our big ticket items like buying more efficient aircraft (our new Airbus A330-300s and the Boeing 787-9 'Dreamliners' we have on order) and being heavily involved in the sustainable aviation fuels arena, to our

crew uniforms, to supplying Fairtrade tea, coffee and sugar on board our flights as standard. We have also rolled out a detailed Sustainable Procurement Policy to our new and renewing suppliers, which sets down wide-ranging standards for suppliers on managing their employees and the environment. We've also undertaken a comprehensive

risk analysis (by industry, location, proximity to brand, environment) of nearly our entire supplier list of 3,000 suppliers. Our new sustainable buying project, starting in 2012, will focus on identifying opportunities to do more.

We've already worked with a number of key suppliers. For example, we have made sure that the suppliers of our distinctive red cabin crew uniform are signed up to the policy and have robust processes to ensure their sourcing processes are ethical and sustainable. We also support ethical and environmental products where possible. We now retail Divine Chocolate on our flights via our onboard magazine, Retail Therapy,

where we also sell beaded products from some of the Maasai communities we support in Kenya, through our charity partner, Free the Children (see below for more details). We also serve One Water on-board: The One Foundation invests its profits into providing access to clean drinking water for people in the developing world.



Our community investment programme

In 2010, we entered an initial three-year partnership with the inspirational Canadian charity, Free The Children (FTC) - the first time Virgin Atlantic had chosen to work with a charity partner over a long-term period.



About Free the Children

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. We are pleased to say that our partnership with FTC has been even more successful than we had hoped - particularly because of the shared vision and objectives of Virgin Atlantic and FTC. FTC has captured the hearts and minds of our staff, passengers, corporate clients and suppliers alike.

Our fundraising performance

Virgin Atlantic raises funds, which are used by FTC to support projects in some of our destinations, as well as in the UK. Since the partnership began we have donated well over £1.5 million to FTC. The long term impact this is having is phenomenal, as our staff and passengers are seeing first hand.



Our CEO Steve Ridgway with crew, digging foundations for our first classroom in Sikirar, Kenya

How funds are raised: through our passengers and our people



Virgin Atlantic staff at the summit of Mount Kenya following a fundraising climb

Our passengers

We ask for so little and yet our passengers help us raise so much!

We are really proud of our on board charity appeal Change for Children, which raises funds for FTC. In 2010 and 2011, passengers' loose change and foreign currency, donated onboard, raised a massive £1,144,767.69. This has made a huge difference to children and families around the world who need it most.

Our people

Passionate, caring and adventurous

Since the launch of our partnership, the wonderful staff across our business have raised an incredible £500,000 for FTC. In true Virgin spirit, they approach

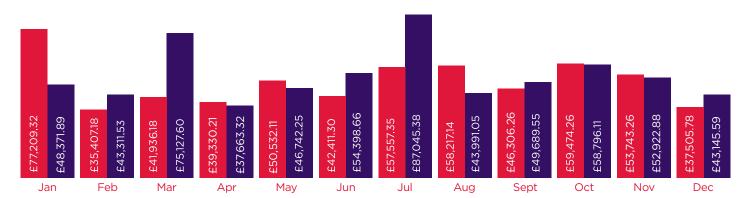
the hard work of fundraising with fun, enthusiasm and the determination to make things happen and to help change lives! In 2011, we have seen them involved in many fundraising adventures - climbing Mount Kenya, Mount Fuji, running marathons in London and in Nairobi, where they ran alongside members of the community we support in Kenya. Staff have cycled

hundreds of miles in the UK and also in India where they finished in one of the communities we support – donating their bikes, bought locally in India, to the local villagers. We have held golf days, cake sales, quiz nights and we've even had a pilot uni-cycling over the Golden Gate Bridge in San Francisco.

Change for Children donations

KEY

2010 2011



The data

Staff 'FUN' raising - 2010 / 2011

India Village Udawad

India Watershed Project

Kenya Village Sikirar

China / India / Kenya Alternative Income projects

Kenya water campaign

India / Kenya Chimney Project

£150,000 £65,000

£35,000

£170,000

£30,000

£30,000

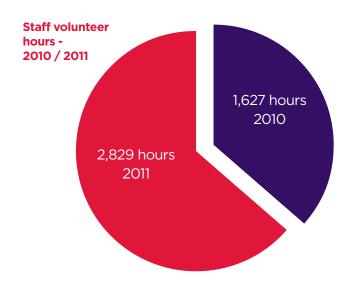
Staff fundraising projects - for details of these projects please see the international development section of this report below.

Staff volunteering

Over two hundred of our staff have used their holiday time to travel to India and Kenya to spend time with, and get to know, the communities we are supporting. They have seen first-hand the impact their funds are having. This is the most amazing experience for both the rural communities and our staff.



Adrian Leonard uni-cycling over the Golden Gate Bridge





Virgin Atlantic staff volunteer trip to Sikirar, Kenya

FTC UK Schools' Programme 2010-2011 🐵



28 young people from our UK Schools Programme on a scholarship trip to Kenya

FTC started their operations in the UK in March 2010, by recruiting a team and building relationships with schools. The team adapted FTC's very successful school programme in Canada, to fit the UK audience and UK National Curriculum. The 'Be The Change' programme was officially launched in the UK in September 2010, and has proven to be a huge success.

The school programme, aimed at children in years 3 to 13 (ages 7-18 years), has two parts. First, a motivational speech is delivered in assembly to the entire school. FTC representatives talk to students about important issues facing the world today,

and encourage them to get involved and take action at a local or global level.

The whole school approach is followed by a 'Leadership and Entrepreneurship Training Workshop' delivered to 15-20 students selected by the school. In this workshop, the young people chosen debate social and environmental entrepreneurship and the Millennium Development Goals. FTC's staff work as mentors with the students, thus reducing teacher workloads and supporting existing curriculum objectives. The students are provided with training and taught how to harness and use their own skills, to take

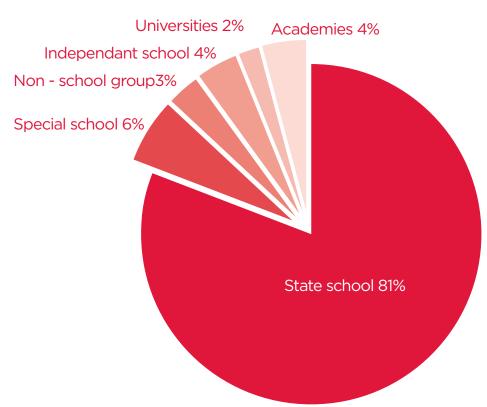
action to make a difference in their own and others' lives – whether supporting a local homeless project or giving water to a community in Kenya. They are supported in educating themselves on global issues and in creating action plans on volunteering. The programme involves ongoing monitoring and evaluation.

Youth in Action Groups (YIAGs) bring 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.

A 'Matching Fund' serves as an incentive to young people who are fundraising for Adopt A Village (see below). £150,000 of the funds is used to enable schools to have their donations matched pound for pound, up to a maximum of £2,500 per project. This doubles the impact of the funds we donate to FTC.

Year 1 Key Results

- Motivational 'whole school' speech given to 12,879 students from 71 schools (exceeding target of 65) from 26 counties across the UK.
- Leadership workshop training given to 1,250 young people from the 71 schools.
- 94% of students, surveyed directly, rated the program 8 or more out of 10.
- 89% reported being more aware of local and global issues.
- 89% students said they had stronger leadership skills to create change.
- 28 young people won a place to visit the Kenya communities supported by FTC, on an 18 day trip (in which they contributed more than 1,550 volunteer hours).



Year 1 March 2010 - May 2011	Targets and expected outcomes	Results
Speaking Tour	65 schools will sign up for the Be The Change speaking tour and workshop.	 71 schools signed up to participate in the Be The Change program.
	2. 16,000 students will receive the 'whole school' motivational speech.	2. **Over 12,879 students received the motivational speech.
	1,200 students will participate in the student leadership workshops.	 Over 1,200 students have participated in the leadership workshops (average group size 15-20 students, at each of the
	50% of the schools will form a YIAG in support of awareness-raising or	71 schools).
	fundraising for FTC.	4. 36 (51% of) schools have reported forming a YIAG and are taking a local or global action.
International Volunteer Trips	30 international scholarship trips/year allocated to young people.	28 international scholarship trips/year allocated to young people.
Matching Fund	£150,000 Matching Fund established and applications are made available	Data to be reported next time.

^{**} Footnote - In 2009, FTC estimated that 16,000 young people per year would attend the motivational speech (based on 250 students per school attending the keynote), whereas the actual number achieved was 12,879 students (with an additional 1000 approx. reached over early July). The difference between target and results achieved was due in part to delivering to primary school groups - rather than just secondary - some of which had limited capacity to assemble larger numbers of students in one space.

Feedback from teaching staff



Carol (Deputy Head teacher at a Crawley school, Sussex):

"I give today 10/10. It is one of the best student workshops I have ever seen. I have had both staff and students thanking me for setting this up but I feel I am basking in your reflected glory! The level of response and comment from those who saw the presentation has been really lovely and what has been great is that they want to do something to make a difference."



Jane (Deputy Head teacher at a school in Billingshurst, West Sussex):

"The workshop was really interactive and it encouraged all the students to participate, even the shy ones. The world map activity was like four lessons of geography rolled into one."



lan (Deputy head teacher of a high school in South West London):

"I have worked in youth enterprise for fifteen years, but have never seen it facilitated this well, with such tangible results in such a short time."

Student spotlight

Hannah, 14 years, London school student

Because of Be the Change, Hannah:

- Set up a Youth in Action Ambassadors' Group at her school
- Took action organising a cake sale to fundraise for Adopt a Village
- Wrote an outstanding application and was awarded a place on the Virgin Atlantic scholarship trip
- Wrote an article about her experiences, which was published by school newspaper 'First News'
- Produced a short film which follows her experience in Kenya
- Ensured that the Be The Change tour returns to her school and is mentoring her peers on how to get involved



Plan for Year 2

The FTC targets are:

- To recruit 65 UK schools. (To date 66 schools have already been booked for the 2011-2012 academic year 47% of schools are returning from last year, and 53% are new schools)
- To deliver the leadership and entrepreneurship training to 20 students per school (1,200+ children and young people in total)
- To engage at least 75% of school children in meaningful action to make a difference in their community locally or globally
- To start YIAGs in 50% of schools
- To include 30 young people in international scholarship trips

FTC international development projects 2010-2011



Our international development projects with FTC are focused on delivering real and sustainable improvements on environmental and social justice issues in some of our developing country destinations. With the funds raised through our onboard donations and staff fundraising activities, Virgin Atlantic supports communities in India, China and Kenya. We are also soon to develop 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.

The 'Adopt a Village' programme

FTC bases their international development approach around their 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.

To date, their 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.

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

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

In addition to the Adopt a Village model, Virgin Atlantic sometimes supports extra, specific projects, where additional funds have been raised and there is a clear need to be addressed. These projects are highlighted in the relevant sections.



China

Aluo, Sichuan, China



Population: 5,220 Households: 1,004 Adult male population: 2,200 (42%) Adult female population: 1,990 (38%) School-aged children: 1,030 (20%)



China community

98% of the population in this region speaks only the Yi language, so learning Mandarin increases opportunities available to children and adults. 50% of the population of Aluo has not previously had access to clean, running water in their homes. The majority of farmers are subsistence farmers, living on less than \$1 USD a day. Villagers

typically have to walk several hours to get to market, where they can sell the little crop surplus they produce. One of the most significant contributors to poor health in Aluo is malnutrition, particularly among children. The villagers only eat two meals a day, usually potatoes, and occasionally rice. Poor hygiene leads to illness, particularly lack of access to

clean water. New alternative income projects began in September 2011. Initial community mobilisation has taken place, with a goat-breeding programme being developed in response to feedback from the villagers that a pig-breeding programme would likely yield little success.

Aluo, China results

Year 1 March 2010 - May 2011	Targets & expected outcomes	Results
Education	 3 classrooms constructed Increased number of children (up to 200) attending school School kits prepared & distributed Construction of office for teaching staff 	 6 classrooms constructed Students began using classrooms (March 2011) - increase from 103 to 128 boys & increase of girls from 78 to 117 (Sept 2010 - March 2011) 500 school kits distributed Office constructed & teaching staff make use of their new space
Healthcare & well being	 To decrease malnutrition, kitchen to be constructed for school feeding programme Children attending school will receive nutritious meal (improving performance & attendance by 30% & decreasing malnutrition) 	 Construction to commence Autumn 2011 FTC reporting further in the next reporting year.
Clean water & sanitation	 Construction & delivery of clean piped water for the community Build 2 latrines Hand washing stations constructed Planned water & sanitation workshops for children & community 	 Construction completed - students & their families use clean water source, daily 2 latrines built. Students & teachers report using latrines 2 hand washing stations constructed & children are currently washing hands. Impact of overall decrease in water-borne illness was reported by FTC in December 2011 FTC reporting further in the next reporting year.

A world of impact - Aluo, China - Jingjing's Story

Twelve-year-old Jingjing lives with her parents and younger sister and brother in the rural community in China. As the eldest child of two farming parents, Jingjing is responsible for much of the household chores, including fetching water and firewood, cooking, and caring for her younger siblings.

However, Jingjing is grateful that she still has the time and the opportunity to go to the new FTC school. She is an intelligent girl and loves to study, dreaming of going to university and becoming a teacher. It'll take a lot of perseverance, but her new school has given her hope that absolutely anything is possible.

New community

FTC has also identified a new community in China: Shu Jia in Sichuan, which will soon start to benefit from the Adopt a Village programme through our additional support from October 2011.

Kenya

Sikirar, Maasai Mara, Kenya



Ethnicities:

90% Maasai, 10% Kipsigis Adult male population: 726 (33%) Adult female population: 1012 (46%)

Children under 18: 462 (21%) Population: 2,200

Virgin Atlantic crew trip to Kenya

Before the start of the project, 95% of the population in Sikirar were living on less than \$2 a day. The illiteracy rate for adults was 73%. There were 270 children in a tiny primary school, with cramped and crumbling classrooms. Many girls and some boys were being taken out of school early, starting from

approximately grade 7 (age 13), in order to marry. By the age of 14, the school dropout rate was 20% for boys and 40% for girls. The average life expectancy was 47 years old, and there was no health clinic in the village. 90% of households were without access to safe drinking water and proper sanitation facilities. Mothers are the

primary collectors of water and were having to travel long distances to the river to fetch water. HIV/AIDS has had a tremendous impact on the health status of many community members, caused in part by lack of education. Deforestation has compounded the effects of famine.

Sikirar, Kenya results

Year 1 March 2010 - May 2011

Targets & expected outcomes

Education

- 1. 3 classrooms constructed & 3 old classrooms renovated. Each classroom outfitted.
- 2. Increased number of children (up to 200). attending school.
- Support teacher training & actively participate in School Pride programme (improving the school's cleanliness & encouraging pride among staff & students).

Results

- 2 classrooms constructed, 1 under construction & 3 old classrooms renovated. Classroom supplies & textbooks provided.
- 2. Increased students from 194 in 2009 to 319; 150 girls & 169 boys enrolled in March 2011.
- 6 teachers are actively participating in School Pride programme & student environmental & health clubs have been established. Students have placed school pride programme posters & are invested in maintaining their school.
- 4. Football pitch set up as requested/funded by Virgin Atlantic staff.

Healthcare & wellbeing

- A new nutrition programme to be introduced & supplemented. Students to receive midday meal.
- 2. Women to receive health education to include 7 habits of a healthy home.
- Community to receive healthcare by doctor or nurse.
- 4. 100 tree saplings to be planted.

- 1. 319 students receive midday meal.
- Households are beginning to establish clothes line, dish-racks, rubbish pits, hand-washing stations & boiling water. Long-term impacts

 FTC reporting further in the next reporting year. To date, 11 households are boiling water, up from 5 in last reporting cycle.
- 3. Entire community of 2,200 have access to healthcare by doctors or nurses.
- 4. Wood plots established & 100 saplings planted.

Clean water & sanitation

- Construct clean water system borehole well for community.
- 2. Build 3 double latrines.
- 3. Construct 2 hand washing stations.
- 4. Planned water & sanitation workshops for children & community.
- 1. Borehole well dug & functional.
- 1 double latrine block built to date, with remainder to be completed. Students and teachers are reporting use of latrines. FTC reporting further in the next reporting year.
- Children currently washing hands. (Impact of overall decrease in water-borne illness to be reported).
- 4. Students are encouraging families to use pit latrine.

Alternative incomes

- 1. Women's groups formed & to receive training in microenterprise.
- Microcredit loans distributed to make household & business investments.
- 3. Increase average yearly income (AYI) through sale of beaded items.
- 4 women's groups formed as well as 2 additional youth groups to develop leadership & business skills. 28 training sessions held to date (up to May 2011).
- Through investment of microloans, alternative income beneficiaries have grown from 224 in spring 2010 to 784 in spring 2011. 100 small loans granted.
- Sept 2009 AYI = 117.00 GBP (equivalent);
 March 2010 AYI = 176.00 GBP;
 March 2011 AYI = 447.00 GBP.

A World of Impact - Sikirar, Kenya - Sellina's story

34 year old Sellina lives in Sikirar. She and her husband are farmers, supporting their family by selling vegetables and other crops. Sellina was herself taken out of education at a young age, but her two children are both enrolled in school and now aspire to be an engineer and a teacher when they grow up.

Sellina has been involved with FTC for the past few years. She attends workshops

on healthy living, leadership skills, farm management and entrepreneurial skills – vital to her as there are few local employment opportunities. She earns alternative income by participating in a FTC beading group. Through the sales of her beading she contributes to her 'merry-goround' group, which in turn helps to support new income-generating programmes for herself and other women in her community.



Holly Branson beading with Maasai women in Sikirar

Additional projects - Narok South District, Kenya

Emergency nutrition project (started August 2011)

In direct response to the East Africa drought we have been able to provide additional support to vulnerable populations in Narok District, through an emergency nutrition programme. This aims to meet the basic needs of communities by providing daily meals for 6,000 children in FTC schools, 3,500 pregnant women, breastfeeding mothers and children under the age of five, across 14 communities. Student nutrition is also supplemented by the school gardens, and by providing

screening, diagnosis and care to children and mothers at Baraka Health Centre.

Clean Water Programme – Sikirar (starts January 2012)

In direct response to the East Africa drought we are also providing borehole wells to three communities, along with complementary water and sanitation education, to supply 7,500 people with sustainable clean water sources for household consumption.

Baraka Farm, Sikirar region (start January 2012)

Baraka Farm will provide access to a practical

learning experience for over 35,000 community members, directly or indirectly, in natural resource management as it pertains to their agricultural activities. This will address a long-term need to improve local livelihoods, household health and environmental stewardship by enhancing the diversity and productivity of agricultural activities, while applying sound environmental best practices.

Chimney project (start January 2012)

Our smokeless chimney project will equip community

members with high efficiency wood-burning stoves and chimneys that not only decreases deforestation by reducing the amount of firewood consumed, but also lower the incidence of respiratory tract infections due to smoke inhalation. It will benefit 500 households in this area.

New community in Kenya

FTC has also identified a new community, Ngosuani, Narok South District, which started to benefit from the Adopt a Village programme through our additional support from August 2011.

Udawad, Rajasthan, India



Ethnicity: Adivasis tribe Households: 138 Population: 765 (978 including those living in cities)

Prior to the project starting growing food was exceptionally hard and illiteracy rates some of the highest in India. A major focus was to reduce dropout and absentee rates among girl students and encourage



Our Chief Commercial Officer, Julie Southern and other staff, starting work on the first classroom at Udwad

gender equality. The level of awareness about clean water and sanitation was very low, with serious consequences for children and their families. The majority of children in Udawad were malnourished due to a lack of nutrition and healthcare. Many women were uneducated about healthy childcare practice, leading to a range of health complications with infants and young children. Udawad has been characterised by large families and low

incomes, perpetuating the cycle of poverty. Families have few opportunities to earn money, so children were taken out of school and sent to work in poor or dangerous conditions. Food security is a constant challenge.

Udawad, India results

Year 1 March 2010 - May 2011	Targets & expected outcomes	Results
Education	 2 classrooms constructed & outfitted. To raise awareness in community about importance of education for girls as well as boys (majority of girls have never attended school). Support teacher & teacher training scheduled for late 2011, to increase skills in diversity & education techniques. 	 2 classrooms constructed & furnished. 35 parents openly discussed issues on gender & trust. Girls show active participation in classes. In March 2011 only 50 (20 girls & 30 boys) of school age (6-14 years old) out of 108 attended school regularly, largely due to seasonal migration for work in cities (*see footnote below). FTC reporting further in the next reporting year.
higher registration rates; 2) promo	eism rates (65.7%) in Udawad, FTC will be focusing more greatly on con bting benefits of regular attendance; 3) promoting alternative income p sonal migration for work that pulls their children out of school.	
Healthcare & well being	 Women to receive training on general health, ante-natal care & child-rearing. Herbal garden planted. 	 Women from 15-20 households received health care training & are equipped with knowledge for a healthy pregnancy & care for their children. Herbal garden ground prepared & seeds sown. 20 households
		benefitting from garden.
Clean water & sanitation	 Build 2 new latrines & hand-washing stations. Water & sanitation education is critical in this area as current awareness about clean water & sanitation is very low & often has serious consequences. 	 Hand-pump under construction. Home visits conducted & 10-12 households visited & trained on washing & clean water storage. Families are also being trained in drip feed irrigation.
Alternative incomes	Micro credit programme introduced to women & receive training in small business activity.	Self help group formed comprised of 10 women.
	2. Women able to sell seeds to supplement	2. 62 women are applying training in

household income & gain financial independence

a new seed collection venture for

income generation.

A World of Impact - Udawad, India - Sohan's story

Sohan is 12 years old and lives in the community of Udawad with his parents and nine siblings. Not long ago Sohan was working in the alcohol business in Udaipur district along with his younger brother. But after hearing news that a FTC school was going to be built in his native village, they decided to return home.

Now every morning, Sohan wakes up early, cleans the house and prepares breakfast for all his 11 family members. Then he heads off to school. At 4:30, the school bell rings and

Sohan heads home, does his chores and finally goes to bed.

Sohan is thrilled to be back home attending school, and grateful that he and his brother no longer have to work in the alcohol business. He loves to study and he hopes to keep learning and end up doing development work in his community when he grows up. Sohan is also a good artist and actor, and always eager to participate in school ceremonies.



Additional projects

'Watershed' development / soil conservation project - Udawad, Rajasthan, India (started August 2011)

Unreliable rainfall, soil degradation, and loss of land fertility in Udawad makes it extremely difficult for rural farmers to deliver strong yields and earn an income. This leads to mass migration to the cities so men can

seek work. The watershed development will consist of stone wall terracing and stone bunding to help increase crop yield, capture and store as much rainwater as possible to grow crops and to meet the drinking needs of the villagers and livestock. It is seen as the best alternative to large and complex irrigation systems that are often costly and

unsustainable. This project will benefit all the households in Udawad village.

Chimney projects in Udaipur District, India (start January 2012)

As in Kenya, our smokeless chimney project will equip community members with high efficiency woodburning stoves and chimneys, benefitting 250 households in Udaipur District, India.

New community in India

FTC identified a new community in Kamoda, Udaipur District, Rajasthan, which started to benefit from the Adopt a Village programme through our additional support from March 2011.

Ghana

Education and water project - Kordiabe, Ghana (start August 2012)

This project will provide education and clean water and sanitation to the Kordiabe community. FTC has been working in the Ashanti region since 1999 to provide students with greater access to quality free primary education. They work with a local partner, the Sisters of Joseph Cluny, who implement their projects and are a trusted and reputable anchor in the communities where FTC has a history of working.

Other charitable support

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 have 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 have donated over 100 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 are able to auction them to help raise valuable funds. We also sometimes offer help to fly children to other countries for life saving medical treatment.

We hope you've enjoyed this year's sustainability report. We're keen to receive feedback so if you've any ideas or suggestions please don't hesitate to contact us by e-mailing environment@fly.virgin.com or community.investment@fly.virgin.com