

Tackling poverty through renewable energy

# NEW ENERGY

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THE QUARTERLY MAGAZINE FROM RENEWABLE WORLD

MARIA McCAFFERY MBE ON  
FIGHTING POVERTY WITH  
RENEWABLE ENERGY

GENERATING CHANGE  
IN NICARAGUA

RENEWABLE WORLD RECEIVES  
STATKRAFT FUND AWARD

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## RENEWABLE WORLD

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## Friends

of Renewable World



## editorial

# Welcome to New Energy



Neil Jeffery, CEO at Renewable World highlights how recent successes and continued partnerships are enabling the organisation to increase its impact in tackling poverty in the developing world.

### NEIL JEFFERY

• RENEWABLE WORLD  
• CHIEF EXECUTIVE  
• OFFICER

Renewable World continues to go from strength to strength, recently securing support from Europe's largest Renewable Energy Company Statkraft to expand our work to supply renewable energy to poor communities in the developing world. We are proud to be the first non-Norwegian organisation to receive a highly coveted Statkraft Fund award.

We plan to use these funds towards significantly ramping up our operations in the developing world, particularly in the two regional programme areas of Central America and East Africa. Our work in Cajiniquil providing an isolated community with renewable energy for lighting as well as pumping clean water for cooking, cleaning and washing is explained further in this magazine.

Additional funds raised through the London Triathlon, highlighted in detail in this edition, together with other resources from Renewable World events will further enable the growth of our work in the developing world. For more

information on how you could contribute to Renewable World's growing impact on the provision of off-grid renewable energy systems please contact our new Director of Fundraising and Communications, Melanie Matthews. Melanie brings a wealth of knowledge and experience to the organisation from two decades of marketing in the commercial and NGO sectors.

At Renewable World we see our unique relationship with the Renewable Energy Industry in Europe as a critical component in the delivery of successful renewable energy programmes providing development benefits to poor communities in the developing world. As a result we are delighted that Maria McCaffery, CEO of Renewable UK, the UK's leading Renewable Energy business association, has agreed to be guest contributor in this edition of New Energy.

Additionally we would like to thank Norton Rose the prestigious City law firm for their continued invaluable support as a long-standing corporate partner, particularly through their hosting of the Renewable World official launch event on the 15th July this year, at their central London offices, with spectacular views over the Tower of London and Tower Bridge. Our grateful thanks to everyone who made the event so memorable, and we hope it will pave the way for the next steps in working towards our vision of a Renewable World.

WE WOULD LIKE TO THANK NORTON ROSE THE PRESTIGIOUS CITY LAW FIRM FOR THEIR CONTINUED INVALUABLE SUPPORT AS A LONG-STANDING CORPORATE PARTNER

MORE INFORMATION...



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# We all need more energy from renewables



Maria McCaffery, Renewable UK Chief Executive explains how renewable energy projects are bringing real benefits to communities in the UK, as well as transforming lives in some of the world's poorest countries.

### MARIA McCAFFERY MBE

RENEWABLE UK  
CHIEF EXECUTIVE

First I should like to take this opportunity to congratulate Renewable World, formerly the Koru Foundation, on the outstanding work that is being carried out around the world. In particular, I am especially proud of the involvement of some of our member companies such as SSE Renewables, Natural Power, SKM Enviro, Statkraft UK Ltd, International Power and Dong Energy who have been involved in projects that have transformed the lives of some of the world's most remote and impoverished communities.

We sometime assume that renewable energy projects are the preserve of developed countries facing dwindling oil and gas reserves, higher energy prices and increased demand for consumption but the projects that Renewable World is involved in serve to highlight the extremely important role that renewable energy has to play in the developing world. Many of these countries have an outdated grid infrastructure which does not reach huge numbers of people living in the most rural parts of the country. In some cases a village may be located many miles from the nearest electricity pylon meaning whole communities are cut off from the main electricity supply. Given the 'off-grid'

suitability of many renewable energy technologies such as wind, solar and hydro, these are ideal for deployment in the developing world.

There is, however, a crossover point: in the UK too, renewable energy has a role to play in bringing financial, environmental and social benefits to local communities. Renewable energy projects such as wind farms offer economic benefits to local communities by way of new jobs and business opportunities. RenewableUK commissioned a study in September looking at how much of the investment in wind energy stays with the local community during the life time of the project, either at the construction stage or through business rates, land rent and local business contracts.

However, many developers go further than this with 'community benefit funds' which can range from financial support for community newsletters, saving local amenities such as post offices, refurbishing village halls and developing community sports projects. For many years now community benefits have been part of industry best practise for our members but RenewableUK is currently working on introducing a set of guidelines aimed at standardising the approach we take to community funds.

We are delighted to support the work of Renewable World. The fact is that every country in the world, big or small, rich or poor, at this point in time needs more energy from renewables and Renewable World is making this happen.

RENEWABLE ENERGY HAS A ROLE TO PLAY IN BRINGING FINANCIAL, ENVIRONMENTAL AND SOCIAL BENEFITS TO LOCAL COMMUNITIES. PROJECTS SUCH AS WIND FARMS OFFER ECONOMIC BENEFITS TO LOCAL COMMUNITIES BY WAY OF NEW JOBS AND BUSINESS OPPORTUNITIES.

### KORU RE-LAUNCHES AS RENEWABLE WORLD

On the 15th July, almost 100 people gathered at the Norton Rose building in London to witness the Koru Foundation re-launch as Renewable World and hear about the future direction of the organisation from Chairman Ray Thomas, Trustee Louis FitzGerald and CEO Neil Jeffery. The organisation was set up three years ago by individuals from the Renewable Energy industry to draw on funds, expertise and skills to bring small scale renewable technologies to the poorest communities in the world. Three years on the aim of the organisation is still the same but our new name will enable us to more effectively communicate our approach and impact of our innovative work tackling poverty in the developing world.

Renewable World would like to thank Caroline May and Lucy Fletcher of Norton Rose for their hard work to make this event a reality.

### RENEWABLE WORLD AT CRANFIELD ENERGY SYMPOSIUM

Renewable World Chief Executive Officer Neil Jeffery spoke as a panellist at the Cranfield Energy Symposium 2010 on July 22nd at Cranfield University, Bedfordshire. He focused his presentation on "Education, Responsible Leadership and Sustainable Business – post-COP15 and in the wake of financial crunch". He shared the panel with business leaders and academics, who explored the role of renewable energy in supporting innovative human development.

### RENEWABLE WORLD OFFICIAL GLOBAL ENERGY SUMMIT CHARITY

Renewable World has been named as the official charity of The London Business School's Global Energy Summit (GES), which will be held on 12th November at Lord's cricket ground. The theme for this year's summit is Energy Security and the Roadmap to 2020, and the event promises to provide an unrivalled forum for political, academic and business thought-leaders to debate the future of the world's most important industry. GES has pledged to donate £2 per delegate to Renewable World's Carbon Compensation scheme to contribute towards the carbon emissions of delegates travelling to the conference.

Nicaragua is one of South America's poorest countries with a vast proportion of the population living off grid. Without electricity, rural communities struggle to access clean water and can become dangerously isolated. In Cajiniquil, Nicaragua, over 100 villagers now have clean water, light and electricity thanks to a twelve foot blade wind turbine system developed by BlueEnergy, Asofenix and Renewable World. James Belgrave, Researcher at Renewable World, reports

"IMAGINE IF THE WIND WAS TOO STRONG BEFORE, THE FLAME WOULD BLOW OUT AND WE WOULD BE THROWN INTO DARKNESS"

**CAPITAL:** Managua.  
**POPULATION:** 5,995,928 (2010 estimate).  
**ADULT LITERACY RATE:** 67.5%.  
**POPULATION WITHOUT ACCESS TO IMPROVED WATER SOURCE:** 21%  
**POPULATION LIVING ON LESS THAN \$2 DOLLARS A DAY:** 32%  
**HUMAN DEVELOPMENT INDEX (HDI):** 0.699, ranked 124th out of 182 countries.  
**LIFE EXPECTANCY:** 72.7 years.  
**GROSS DOMESTIC PRODUCT (GDP) PER CAPITA:** \$2570, ranked 130th out of 182 countries.  
**PROPORTION OF ENERGY FROM FOSSIL FUELS:** 75% (mostly oil).  
**PROPORTION OF ENERGY FROM RENEWABLES:** 25% (mostly hydro and geothermal).

Nicaragua's first wind farm (40 megawatts) began operations in February 2009.

In Latin America and the Caribbean more than a hundred million people have insufficient access to electricity, and, as with much of the developing world, the great majority are located in rural settings where connection to the grid is prohibitively expensive for both national governments and private energy companies.

Nicaragua stands out as having some of the lowest electricity coverage in South America; 55% nationally and 40% in rural areas, according to UN statistics (CEPAL, 2007), compared to the regional average of 94.6%. Nicaragua also has a higher dependence on oil for electricity generation; at 75% compared to the 43% regional average. It is the second poorest country in the western hemisphere, which makes the need for this basic resource all the more urgent.

Those Nicaraguans living without access to electricity use 'Candiles' (Kerosene filled lamps) for lighting, which are expensive, and polluting, giving off fumes which can cause fatal respiratory infections. In rural areas there is no electricity to pump water; instead it is hauled back to the village in buckets and containers by women and children, which can expose the water to contamination. The lack of electricity limits communications with the rest of Nicaragua, restricting access to markets and creating a barrier to economic development. It also decreases the number of hours per day available for productive activities or education.

The village of Cajiniquil is not unusual in rural Nicaragua. Positioned at the top of the foothills of an isolated extinct volcano in the central region of country, about three and a half hours north of Managua along a potholed road, it's unlikely that the village will be connected to the national grid in the future.

However, the plateau surrounding the village is characterised by strong and constant winds- perfect conditions for generating power.

Renewable World and their Nicaraguan partners Asofenix and BlueEnergy chose Cajiniquil as one of the first communities in the central mountainous region to receive support implementing and constructing a 1kW wind turbine to provide clean, renewable electricity. The twelve foot blade wind turbine has been providing electricity for 15 households (almost 100 people) since May 2010 and is enough to power four energy saving light bulbs in each household as well as run electrical equipment.

"WE ARE NOW HEALTHIER AS WE KNOW THAT THE SMOKE THAT THE KEROSENE FILLED TIN LIGHTS GIVE OFF WAS DAMAGING" ZORAIDA OLARIO



Dahley, Pedro and Zoraida sitting by the wind turbine that powers their community



Members of the community helping to set up the wind turbine in Cajiniquil

# Change in Nicaragua

MORE INFORMATION ABOUT RENEWABLE WORLD'S PROGRAMMES...



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## EWEA AND RENEWABLE WORLD

This project was made possible thanks to a generous donation by EWEA alongside other donors WPD and International Power. At every EWEA event, the organisation donates 1 Euro per participant and at the EWEA annual event 2010 (formerly EWEC) in Warsaw, the EWEA presented a cheque worth €5,400 to Renewable World: this sum went directly towards funding the wind turbine at Cajiniquil.

“WHEN YOU HEAR STORIES ABOUT THE POSITIVE IMPACT ONE TURBINE HAS ON THE LIVES OF HUNDREDS, IT REALLY MAKES YOU REALISE THE AMAZING DIFFERENCE THESE SMALL-SCALE, OFF GRID RENEWABLE ENERGY SYSTEMS MAKE TO PEOPLE'S LIVES”

JO KELLY



Dahley explaining how the control centre works

The control centre for the turbine, a small cabin in the centre of the village, is run by Dahley Gomez, son of the mayor of the town, who, after full training by BlueEnergy, is now responsible for maintaining the system. The centre converts the current from the turbine and stores the energy in batteries to provide electricity when the community needs it most.

Each household that benefits from the electricity pays a small monthly sum (the tariff is determined by the community itself- usually around two or three dollars) which contributes towards the upkeep of the energy system. Minor repairs are carried out by Dahley without external assistance.

Crucially the Cajiniquil turbine powers an electric water pump. Now the villagers have access to clean, safe water which can be used for cleaning, drinking and cooking. Villagers in Cajiniquil can also watch television and charge and use mobile phones. The importance of maintaining connections to the outside world cannot be overstated in such an isolated community.

In the future any households not presently connected to the mini grid will be provided with solar panels to generate their own electricity.

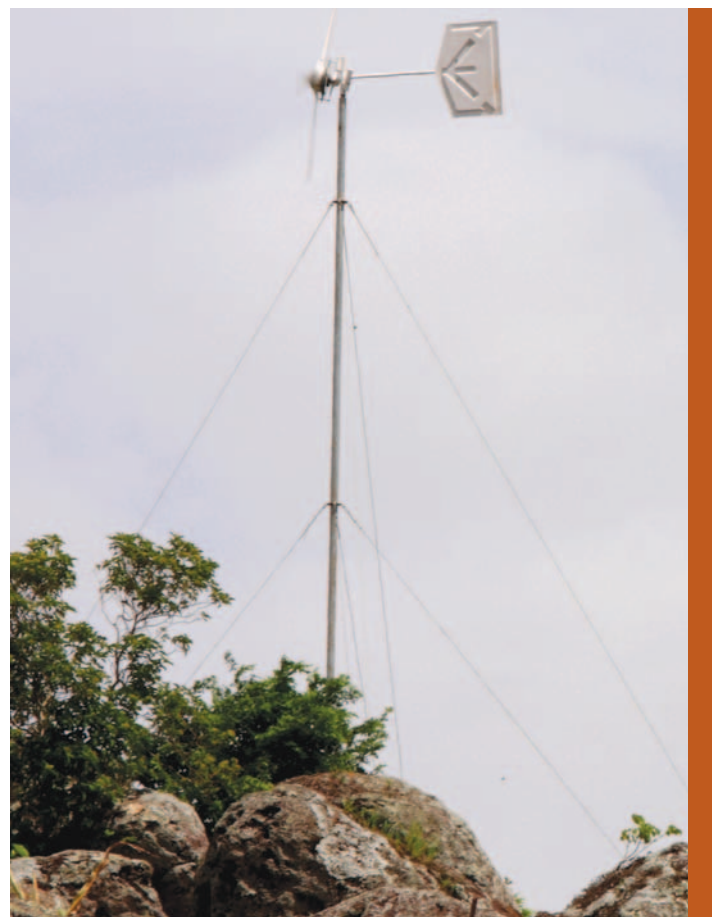
“At every stage of the project there was full community involvement, from the needs assessment, to project design, to implementation and evaluation,” Jo Kelly, Business Development Director at Renewable World explains.

Community members have been trained to operate and maintain the system, as well as being organised to financially sustain the projects themselves. Renewable World, by linking BlueEnergy and Asofenix, played a pivotal role in the capacity building required for Asofenix to replicate the successful social and technological aspects of the project in other communities in Nicaragua.

Jo Kelly says: “With an electricity production portfolio so heavily reliant on expensive and environmentally damaging fossil fuels, and with an average of 80% of the rural population not connected to the national grid, off-grid renewable energy has a major role to play improving the lives of poor and marginalised people in Nicaragua. In Cajiniquil, Renewable World has worked with the community to provide a sustainable electricity solution at a price point the community can afford. When you hear stories about the positive impact one turbine has on the lives of hundreds, it really makes you realise the amazing difference these small-scale, off-grid renewable energy systems make to people's lives.”

“WE CAN SEE ONE ANOTHER BETTER WITH THE NEW LIGHTING SYSTEM. IT IS ALSO MUCH HEALTHIER... I THINK THE CHANGE HAS BEEN ENORMOUS”

ZORAIDA OLARIO



The turbine that powers the community of Cajiniquil

**SOURCES:** CEPAL, 2007. Istmo Centroamericano: Estadísticas del Subsector Eléctrico. UNDP Human Development Report 2009

## RENEWABLE WORLD EVENTS CALENDAR

Catch Renewable World at one of these upcoming conferences or join a fundraising event.

- RenewableUK Annual Conference and Exhibition



2nd – 4th November  
Glasgow SECC –  
stand 209

Visit the Renewable World stand no. 209 at RenewableUK's Annual Conference and Exhibition. If you are attending this event why not consider compensating for your travel emissions by donating to our carbon compensation scheme?

Find out more: <http://koru.amee.com>

- Global Energy Summit



12th November  
London – Lord's cricket ground

Renewable World is the official charity of this year's Global Energy Summit and will not only be exhibiting at the event but also receive £2 per delegate from GES towards compensating for the carbon emissions of each delegate.

[www.londonglobalenergysummit.com](http://www.londonglobalenergysummit.com)

# London Triathlon Renewable Energy Challenge

This year the Renewable Energy Challenge lived up to its name both on and off the track, with injuries, team replacements and a race against the clock to reach the venue in time, but for those who made it to the start line it was all worthwhile.



Pro Tri-athlete Toby Radcliffe presents the trophy to the fastest Renewable Energy Team – Centrica colleagues Laura Jeffs, Finn Coghlan, Ross Ovens



Finn Coghlan bringing the Centrica team home to victory



Brad Currin running in his first ever triathlon for Renewable World

Centrica fought off competition from Noble Denton and MatchTech to win the team relay in 1 hour and 25 minutes, all the more impressive because their cyclist Ross Ovens had to go that extra mile to take part.

Ross had been undertaking some maintenance work at the Lynne and Inner Dowsing wind farm off the coast of Skegness. His race to the triathlon start-line at London's Docklands began at 6am on the morning of the race when he finished his shift and took a crew vessel for an hour and half across the North Sea to Grimsby. He then took a taxi for 32 miles to Doncaster to catch the two hour fast

train to Kings Cross, where he caught the tube and DLR to reach the Excel Centre finally meeting a taxi his girlfriend had sent to the venue with his bicycle and cycling gear in it! Such commitment deserves a medal in itself!

Professional Iron Man tri-athlete Toby Radcliffe, who supported the Renewable Energy Challenge participants with a weekly training blog on the Renewable World website, presented the trophy to the triumphant Centrica team. We are delighted that Toby chose to take time out from his hectic schedule racing for Timex and working as a sustainability consultant on projects such as the EDF Energy Birmingham Half Marathon to support us and we hope to work with him again in the future.

In the individual event, despite falling on the first corner of the cycle route, last year's winner Simon Peltenburg from RES retained his title as fastest renewable energy individual finishing in 1 hour and 21 minutes. Brad Currin from Shell International who was competing in his first ever triathlon was close behind, finishing in 1 hour and 34 minutes.

Congratulations to all the teams and individuals who took part in this year's challenge. Entries are already open for next year so please contact us if you are interested in securing a place.

#### MORE INFORMATION...

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A triumphant team MatchTech Freddie Hall, Jo Raven, Martin Bennell

## Sky Dive for Sustainable Energy

Amongst locals, Cambridge is jokingly referred to as 'wind power central' due to the number of wind farms which have been built in this quiet part of the fenlands. So what better place to do a sky dive to raise money for Renewable World's sustainable energy projects?

Conrad Trevelyan, a Dulas Ltd Consultant and Project Manager to Wind Farm Developers saw three different wind farms during his 10,000ft tandem sky dive from a plane in Cambridgeshire on 17th July. Free falling for 30 seconds, Conrad was able to get a bird's-eye view of local wind farms in the area including Randonmoor, Red Tile and Coldham.

He explained: "I've always wanted to do a sky dive and thought it would be good to raise money for those less advantaged than myself – coupling this with renewable energy and climate change mitigation just makes it all the better for me! I would like to thank all those who sponsored me, in particular, my colleagues at Dulas, staff at CREST (at Loughborough University), members of the Renewable-UK Wales Strategy Group and my family."

Renewable World would like to congratulate



Conrad Trevelyan proudly presents his sky dive certificate

Conrad on reaching his fantastic goal of raising £1000 to enable us to bring clean energy to more communities in the developing world. If you are planning a challenge or event in future and would like to raise money for Renewable World please contact us to find out how we can support you.

### MORE INFORMATION...



Contact Jen Glyn  
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Simon Peltenburg from RES reigned supreme in the individual event

## Renewable World receives Statkraft Fund Award

Renewable World is proud to be the first non-Norwegian organisation selected to receive an award from the Statkraft Fund for our work on small scale renewable energy projects in developing countries.

Statkraft President and CEO Christian Rynning-Tønnesen presented the award explaining "this year's awards are made to organisations and projects which, in different ways, focus on the connections between energy, climate and sustainable development. This is completely in line with Statkraft's work to develop more renewable energy both in Europe and developing nations". Renewable World received £52,000 and an elegant plaque to commemorate the award.

Statkraft is Europe's largest Renewable Energy Company developing hydro, wind, gas and innovative energy solutions like osmotic power. The Statkraft Fund has been established to support public interest purposes and awards up to five million NOK each year to NGOs, foundations or similar whose projects have a clear connection with Statkraft's activities and are primarily directed towards developing nations. Renewable World was chosen this year alongside



Jo Kelly receives the Statkraft Fund Award on behalf of Renewable World

prestigious organisations such as the Norwegian Red Cross, Norwegian Church Aid, the Science Centre of Northern Norway and the Ny Ålesund Symposium.

Jo Kelly, Renewable World's Business Development Director, collected the award at Statkraft's main office in Lilleaker, Oslo, during the organisation's annual summer party. The awards ceremony, now in its fifth year, was a highlight of the event, which was attended by key Norwegian Politicians and Business leaders as well as Statkraft staff and provided an opportunity for everyone to find out more about the work of each of the awarded organisations.



Jo explains: "Renewable World are extremely pleased to receive this award, both for the impact it will have in enabling us to scale-up the work in our new East African programme, and for the relationship we are building with Statkraft around our shared commitment to bring clean and sustainable energy sources to all areas of the world. It's an honour and a privilege to be Statkraft's first non-Norwegian winner and we are grateful for this opportunity to continue to widen and strengthen our international links."



More than 1.6 billion people in the world are living without access to energy which could dramatically improve their quality of life. In this issue, we take a festive focus, looking at a number of easy ways you can celebrate a 'Green Christmas' and help make a real difference to the lives of some of the world's poorest people.



## Green Greetings

An estimated 1.7 billion Christmas cards are sent each year in Britain, the equivalent of 200,000 trees, most of which are thrown in the bin each year. Renewable World has come up with a way that shows people you care, at the same time as caring for the planet and people in developing countries, who are most affected by climate change.

Our e-greetings are quick and easy to use and are not only more environmentally friendly than paper cards but will enable us bring clean energy to those who need it most. You can either select a design from our website and have your company name and logo inserted, or you can request a bespoke design – for prices please contact us. Individuals can send our standard cards free of charge, but we recommend a donation of £5 – about the cost of one pack of cards in the shops.



Choose your e-cards at [www.renewable-world/get-involved/shop](http://www.renewable-world/get-involved/shop) or call us to discuss your company card



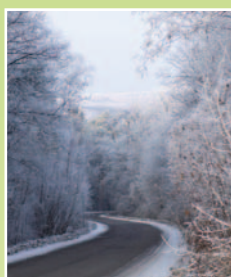
## Give the Gift of Light

Stuck for what to get for Christmas for the person who has got everything? Why not give them the gift of light – a gift that keeps on giving after Christmas is over. Your £20 gift will go directly towards funding one of our renewable energy projects which bring light to communities in the developing world. £20 could pay for a solar lamp and training in how to use it which means people are not exposed to indoor smoke pollution from burning wood or kerosene and are able to be more productive in the evenings, studying or carrying out income generating activities like sewing.

You will receive a certificate to give to the recipient explaining what you've bought on their behalf and a gift card on which you can write your own message.



Visit [www.renewable-world/get-involved/shop](http://www.renewable-world/get-involved/shop) to give the gift of light!



## Driving Home for Christmas

For most of us Christmas is a time for visiting friends and family. Whether your seasonal celebrations will see you enjoying a quiet few days with your nearest and dearest or a hectic week with the extended family, the lack of reliable public transport at Christmas mean it is highly likely you will spend some of your Christmas break in your car.

Renewable World's Carbon Compensation scheme gives you the opportunity to compensate for the carbon emissions from your Christmas travel. Just £4.35, which Renewable World will spend on Renewable Energy projects in communities hit hardest by climate change would compensate for the 0.16 tonnes of carbon produced by a 300 mile round trip in a medium sized car.



Its quick and easy to do, so compensate now at [www.renewable-world.org/get-involved/carbon-compensation](http://www.renewable-world.org/get-involved/carbon-compensation).



## Travel-free festive shopping

Every Christmas thousands of shoppers escape the crowded high street, choosing to buy their gifts online. This year if you buy your Christmas gifts on Amazon's UK or US sites, Renewable World will receive at least 5 percent commission on the purchase price – and it won't cost you a penny more!

All you have to do is follow the link on the Renewable World Website. If you are looking for ethical and eco friendly presents, you can follow the link to Nigel's Eco Store, where ten percent of the money you spend will go towards building community based renewable energy systems in the developing world.



Start your Christmas shopping early and raise money for Renewable World at: [www.renewable-world/getinvolved/shop](http://www.renewable-world/getinvolved/shop). The scheme is available all year – ideal for birthday gifts too.



If you would like to make a donation to Renewable World just go to our website [www.renewable-world.org](http://www.renewable-world.org) and click on 'donate now', where you can make a one-off gift or download our Direct Debit form to give on a regular basis.

## KEEP IN TOUCH

[www.renewableworld.org](http://www.renewableworld.org)



It's really easy to keep up to date with Renewable World, our projects and how you can get involved. Just go to our website: [www.renewableworld.org](http://www.renewableworld.org) and click on 'subscribe now'. Give us your details and we will do the rest!

You can unsubscribe or change your details at any time, but don't worry we won't inundate you with mail and we will never pass your details on to anyone else.