

Tackling poverty through renewable energy

NEW ENERGY

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THE QUARTERLY MAGAZINE FROM RENEWABLE WORLD

VIEWPOINT – RICHENDA VAN LEEUWEN
ON SUSTAINABLE ENERGY FOR ALL

TECHNOLOGY TRANSFER IN NEPAL
BRINGS WATER TO HILL COMMUNITIES

CHALLENGE YOURSELF IN THE
OLYMPIC YEAR!
...and more



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RENEWABLE WORLD

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Friends of Renewable World

Renewable World is proud to be supported by our Friends who provide financial support of £25,000 per year for a period of three years to support the vital infrastructure of our organisation. We are also delighted to receive corporate support from more than 30 other companies from the Renewable Energy Industry and associated supply chain.

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SINCLAIR KNIGHT MERZ
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Renewables

editorial

Increasing our impact in 2012



Neil Jeffery, CEO at Renewable World explains how the organisation hopes to make an even greater impact on reducing energy poverty in 2012 - the UN Year of Sustainable Energy for All.

NEIL JEFFERY

RENEWABLE WORLD
CHIEF EXECUTIVE OFFICER

In 2011 Renewable World improved the lives of more people living without access to energy and enhanced the quality and reach of our programmes. We are now poised to further increase our impact in 2012 by making an even greater contribution to improving access to energy for poor consumers. We have set ourselves ambitious targets in order to make this a reality, and as part of this commitment to scaling up our activities, Renewable World has recently opened offices in both East Africa and South Asia. This presence in the programme regions will enable Renewable World to facilitate stronger and deeper relationships with partners. Through building their knowledge and skills in areas such as enterprise development, institution building and technical capacity we will support partners to provide clean, affordable energy to even more remote, marginalised communities.

Renewable World aims to achieve maximum development impact through our programme interventions by prioritising work with off-grid communities in areas of market failure where consumers are presently not served by the private sector. By supporting communities to develop productive uses for energy and stimulating enterprise development we aim to increase the potential that, in the medium to long term future, entrepreneurs and private businesses will be

in a position to serve these poor 'base of the pyramid' consumers. One example of this is our new programme intervention with BSP – Nepal, highlighted on page three. BSP are experts in household biogas and have provided systems for thousands of homes in Nepal and Northern India but have sought Renewable World's experience of using energy to support income generation, enterprise development and other productive uses. With our support BSP will carry out pilot projects in three communities which will provide energy for income generating activities such as processing dairy products.

Central to our ability to increase our impact on energy poverty is our relationship with industry. We are proud to be the charity of the Renewable Energy Industry and are grateful for the support we receive from over 30 major players in industry and associated supply chain. We will continue to seek to strengthen this relationship by working with corporate supporters to leverage skills, technology and resources to increase the number, quality and range of our sustainable energy interventions.

There is now global acceptance of the important role that access to energy has to play in development and in recognition of this UN Secretary-General Ban Ki-Moon has designated 2012 the 'Year of Sustainable Energy for All'. Renewable world is proud to have been invited to join the UN Foundation's Energy Access Practitioner Network, providing our expertise and advice on addressing the challenge of energy access for the poorest in the world. We are delighted to have a viewpoint article from xxxxxx at the UN Foundation on this topic.

MORE INFORMATION...



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Working towards Sustainable Energy for All



Richenda Van Leeuwen is Senior Director of the Energy and Climate team overseeing the UN Foundation's work on energy access.

RICHENDA VAN LEEUWEN

- SENIOR DIRECTOR
- ENERGY AND CLIMATE TEAM
- UN FOUNDATION

According to the International Energy Agency's 2011 World Energy Outlook report, more than 1.3 billion people living in developing countries still don't have basic access to electricity, and rely on expensive, poor quality solutions such as kerosene based lights in their homes. These provide low light levels and are detrimental to their health due to fire risks as well as causing respiratory illnesses. A further billion people whose homes are on the grid have only intermittent access to electricity. More than two billion people still depend on cooking fuels and stoves that also expose their families to serious indoor air pollution that prematurely kills nearly two million people per year.

In order to focus the world's attention on energy issues common to industrialised and industrialising countries alike and to lay out a new global action agenda, United Nations Secretary-General Ban Ki-moon in September 2011 launched a multi-year initiative, 'Sustainable Energy for All' to focus on achieving three intertwined global objectives by 2030:

- Ensure universal access to modern energy services.
- Double the rate of improvement in energy efficiency.
- Double the share of renewable energy in the global energy mix.

Recognising that a global shift to cleaner energy solutions that support economic growth, social development and preserve our environment involves the work of many stakeholders, the UN is engaging with private sector companies to work alongside

governments to focus on a robust set of policy and financing mechanisms to scale investment activity in support of these objectives.

At the same time, in order to support work of Sustainable Energy for All and in particular the objective of working to achieve universal energy access, the United Nations Foundation has launched an Energy Access Practitioner Network that focuses primarily on small and medium sized companies (SMEs) and not-for-profit organisations. We are extremely pleased that Renewable World is playing a full and active role as a member of the Energy Access Practitioner Network and thank them for their contribution to date. It includes more than 100 companies delivering energy products and services in developing countries, focusing on micro-grids, as well as community level solar PV and solar thermal, biomass, micro-hydro and standalone renewable energy solutions.

One of the premises of this work is that the 1.3 billion people lacking access to electricity represent both an existing market – given their monthly payments for example for kerosene for lighting, as well as charcoal for cooking – and a significant market opportunity, as long as products and services are matched appropriately to their household monthly payments for energy services. The Network is focused on a portfolio of immediate and long-term advocacy and actions using high quality solutions and specific market-based applications which have shown that delivering off-grid renewable energy solutions at scale in developing countries to low income customers can, provided that the right support and incentives are in place, both be commercially viable and support social and economic development that will help us to reach the goal of delivering Sustainable Energy to All by 2030.

“RENEWABLE WORLD HAS BEEN INVITED BY THE UN FOUNDATION TO JOIN THE UN'S GLOBAL ENERGY ACCESS PRACTITIONER NETWORK TO HELP DEVELOP INNOVATIVE AND EFFECTIVE RESPONSES TO ADDRESSING THE CHALLENGE OF ENERGY ACCESS FOR THE POOREST IN THE WORLD.”

NEWS

NEW BIOGAS PROJECT IN NEPAL

Renewable World and local partner BSP Nepal (BSP-N) recently began working on community level biogas pilot projects in Kapilbastu and Nuwakot districts in Nepal. Cow dung will fuel the biogas plants and the energy produced will be used for income generation activities such as processing dairy products. Excess biogas will be channelled to houses for clean, cost efficient fuel for cooking and lighting and the slurry output from the plant can be used to fertilise fields, increasing vegetable crop yields.

With Renewable World's support BSP-N will initially work with communities to identify appropriate income generation activities and will subsequently carry out micro-enterprise training workshops before installation of the biogas plants commences.

BUILDING OUR CAPACITY IN THE REGIONS

At the end of 2011, Renewable World opened offices in both East Africa and South Asia. The new regional centres in Nairobi and Kathmandu respectively are part of a strategy to expand our impact on the ground, and accompany the recruitment of Programme Managers for both regions. Having a presence in our programme regions will enable Renewable World to build stronger relationships with new and existing partners, increasing the number and range of sustainable energy interventions to provide clean, affordable energy to more marginalised off-grid communities.

CHRISTMAS E-CARD APPEAL A SUCCESS

Renewable World is delighted with the success of our Christmas e-card appeal which saw over 20 companies from the Renewable Energy Industry and associated supply chain sending our bespoke Christmas e-cards in return for a donation. A truly global initiative, cards were sent out in several languages to thousands of recipients all over the world, raising over £10,000. Renewable World would like to thank all the organisations who participated in the scheme - we hope to continue to work in partnership with these companies throughout the coming year to make a difference to more people living in energy poverty.

Nepal

Capital: Kathmandu

Population: 30,485,800

Life expectancy:
68.8 years

Population living on less than \$1.25 a day:
78.1%

Percentage of households without access to electricity:
49%

Percentage of population without access to clean water source: 11%

All figures from UNDP Human Development Report



Water for Life

Water is a basic human need and most people could not imagine living without access to it in their homes and places of work. We certainly couldn't imagine having to walk for miles each day to collect it in order to carry out daily activities such as washing, cooking and cleaning, but that is the reality for many people living in remote parts of the world, especially in the mountainous parts of Nepal.

Although it is estimated that 89% of people living in Nepal have access to water, in hill areas distances to water sources are great and in many cases the water quality is very poor. The incidence of water borne diseases is high, with 9,000 children dying each year of avoidable diarrhoeal illnesses. Because water availability is limited to what people can carry, drinking and cooking is prioritised, leaving scarce water resources for hygiene, sanitation and irrigation. Without water for irrigation farmers are dependent on the monsoon rain which limits their production to a subsistence level; this impacts on the availability of food in the community and the nutritional value of people's diet.

Most families need between eight and ten buckets of water a day for household use. Each bucket is transported in a traditional bamboo basket, a 'dhoko', which is slung on the back and carried by a headband around the forehead. In total women and children spend up to three hours each day just collecting water, which represents a significant burden. Not only does it take up valuable time when they could be involved in domestic, academic or income generation activities, but it also poses health and safety risks through having to walk down steep and often slippery terrain to the water source and to carry heavy loads on their backs.

However, expanding water distribution to hillside communities in Nepal presents a real challenge. Two-thirds of the country's population live in hilly or mountainous regions that are remote and sparsely populated and cannot be easily served by conventional piped water systems. Alternative systems using diesel engines are too expensive for rural communities to install, fuel and maintain. Therefore many communities still rely on collecting water from distant sources despite the time involved and many water sources are overused and contaminated.

PROVIDING APPROPRIATE SOLUTIONS

At the start of 2011 Renewable World commenced a new programme of work with a Nepalese partner - Centre for Rural Technology Nepal (CRT/N) aimed at improving the health, education and livelihoods of four rural communities in Dhading District. This work involves the provision of safe, clean water using hydraulic ram pump systems, the first of which was successfully installed in Sunaula Bazaar in May 2011. Ram pump technology is centuries old but with a few modifications in the design it can provide a sustainable and low cost option for pumping water to rural communities by using only the power of falling water to pump a percentage of it to a greater height. In Sunaula Bazaar, CRT/N and local partner Rural Mutual Development (RMD) have installed a ram pump with a 1 inch head which is lifting 5500 litres of water 41 metres above the source.



Women from Sunaula Bazaar explain to Renewable World's South Asia Representative Robin Vernon-Harcourt how delighted they are with their new water source.



Mr Tara Bahadur Adhikari – the technician who maintains the Sunaula bazaar ram pump

Each household in Sunaula Bazaar assisted in the installation of the ram pump by contributing 780 Nepalese Rupee (the equivalent of about £5) towards the cost of the construction materials. This is extremely important to ensure the community feel a sense of ownership of the system to promote the long-term sustainability of the system. The community has also formed a user committee to oversee the management of the system; the committee is in the process of setting an appropriate monthly tariff for the use of the water which will be used to cover the cost of maintaining the system.

The newly installed hydram is pumping water to two tap stands which are providing almost 300 people from 36 households with constant access to safe water from a protected source for both domestic use and cattle rearing. Women and children from the local community have been relieved of the burden of collecting water and are now able to spend their time in more productive ways such as generating income, studying and participating in social activities. This has given them a sense of empowerment and as Ms Sita Dawadi, Treasurer of the users' committee explains: 'It saves us time. Now we can send our daughters to school'. We expect that access to clean water will also improve the health of the community through reducing water borne diseases and we will be monitoring this closely, but already local women have reported that no one in the village has had to visit the hospital since the ram pump was installed, whereas this was a common occurrence before.

CRT are keen to replicate these benefits in three more communities in Dhading district, including Salyantar where 35 households will benefit from the provision of clean water, and

Mahadevsthan where the ram pump will provide water for a school of 600 pupils. If you would like to support Renewable World in bringing the benefits of clean water to more communities in Nepal then please contact Melanie Matthews by email: Melanie.matthews@renewable-world.org or telephone: 00 44 (0) 1273 234 801.



The community of Sunaula Bazaar lies in the Dhading district of Nepal, three hours from Kathmandu and is only accessible from the nearest road via a rope bridge. Until recently there was no piped water in the village and women and children completed a round trip of 20 minutes to collect water several times each day. However this water was from a source also used by both humans and animals for bathing and so was not safe for consumption.

Promoting South-South Technology Transfer

As part of this project, Renewable World facilitated a technology transfer between our Nepalese partner CRT/N and Filipino organization Alternative Indigenous Development Foundation (AIDFI) - winner of numerous awards for their ram pump technology including the BBC World Challenger, Ashden and Ramon Magsaysay Awards. Two CRT/N staff undertook training with AIDFI in their offices in Bacolod City in the Philippines between 31 October and 30 November 2011. During this month, CRT/N were trained in the manufacture of the ram pump and also visited various project sites in the Philippines where AIDFI have installed the pumps to learn about different ways of implementing the technology, mobilizing the local community and setting pricing structures for the use of the water from the hydram. This involved interacting with local communities during their participation in the project both at the installation and operation phase, as well as studying about the direct and indirect effects of the project on the communities' social and economic development. This will enable CRT/N to successfully manufacture the ram pumps in Nepal and to work with communities to secure their participation in the project, ensuring that it delivers real benefits for them and their families.

RENEWABLE WORLD EVENTS CALENDAR

Catch Renewable World at one of these conferences or participate in a fundraising event.

- Brighton Marathon



15th April 2012
Brighton

Sign up early and secure your place to run in the Brighton Marathon and raise vital funds for the work of Renewable World

www.renewable-world.org/get-involved/fundraising-events

- EWEA 2012



16th – 19th April 2012
Copenhagen, Denmark

Visit Renewable World on the EWEA stand C3-A34 at Europe's premier wind event and consider compensating for your travel emissions by supporting our work:

www.renewable-world.amee.com

- All-Energy



23rd – 24th May 2012
Aberdeen, Scotland

Join us at the UK's largest renewable energy show and consider compensating for your travel emissions by supporting our work:

www.renewable-world.amee.com

- Running4renewables



27th May 2012

With a half marathon, full marathon and hairy haggis team relay there is a distance for everyone at the Edinburgh Marathon Festival so what are you waiting for? Join running4renewables now!

www.running4renewables.org.uk

- Great East Swim



Join Renewable World's charity partner Consense in taking on the British Gas Great East Swim on 16th June 2012 in Suffolk. Consense is challenging other companies in the industry to give them a run for their money - if you're interested then contact Elma Glasgow, Business Development Manager:

elma.glasgow@consense.co.uk
or 07980 360336.

2012: Mark the Olympic year with a challenge of your own

2012 heralds the return of the Olympics to British soil and to mark the occasion Renewable World is calling on you to take up an Olympic challenge of your own and help us to tackle poverty through renewable energy.



Some of the 2011 running4renewables team – our thanks to lead sponsors vento ludens and t-shirt sponsors Smartest Energy. Sign up now to join the 2012 team!

2012 heralds the return of the Olympics to British soil and to mark the occasion Renewable World is calling on you to take up an Olympic challenge of your own and help us to tackle poverty through renewable energy.

This year we have even more challenge events than ever before so whatever your preference there is definitely something for everyone. In our home town of Brighton we have charity places for the half marathon on 19th February and full marathon on 15th April. With its sea breeze and iconic sights of the Royal Pavilion, North Laines and Palace Pier, Brighton is fast becoming one of the most popular race locations and we'll be there to cheer you along the way!

The successful running4renewables event is set to take place for its third consecutive year at the Edinburgh Marathon festival on 27th May. With a marathon, half marathon and hairy haggis team relay taking place on the same day, there is a distance to suit everyone. For the first time this year running4renewables will also take place in Germany – let us know if you are interested in taking part in Europe and we'll keep you updated!

If you're looking to soak up the Olympic spirit in London then what better way to do it than by entering the Run to the Beat half marathon on 21st October which starts and finishes at the O2 Arena. And if the Olympic spirit isn't enough, you'll be treated to a range of musical performances along the route to keep you going to the finish line.

If running isn't your cup of tea, then how about a team swim? Renewable World's charity partner Consense is taking on the challenge of the British Gas Great East Swim on 16th June and invites you to join them. If you'd like to take up the challenge and swim ½, 1, or even 2 miles in the beautiful clean waters of Alton Water reservoir, near Ipswich, contact Elma Glasgow by email: elma.glasgow@consense.co.uk or call: 07980 360336.

And finally – if you think these events are just a bit tame, how about Hellrider? Taking place in June 2012 at West Wycombe Park, the event is an off-road team duathlon (run and bike) of "devilish proportions". Because the event is held on a National Trust property you can bring the family for a great day – they can wander around lakes, streams and temples while you go all out for glory in the Hellrider!



Zach, Tina and Bennie from the Mapandi Farmers Association are pleased with the new wind turbine which is pumping water, enabling them to irrigate their fields and grow crops even in the dry season.

EWEA: Supporting Wind Energy Big and Small

The European Wind Energy Association (EWEA) is committed to promoting the adoption of wind energy technology and as well as the support they provide to their members, this year they also helped make reliable access to energy a reality for a remote coastal community in Mozambique. As part of their CSR strategy, EWEA have pledged to donate €1 to Renewable World for every delegate attending their conferences.

2011 saw EWEA hold Annual and Offshore conferences in Brussels and Amsterdam respectively, and as a result of record attendance they were able to donate over €17,000 to support Renewable World's work in Mozambique. Renewable World is working with local partner The Clean Energy Company in northern Mozambique to install a wind-based micro-grid in the remote community of Mapandi in Cabo Delgado Province. The system will provide power to pump water for

irrigation, enabling the community to increase their agricultural yields despite changing climate conditions which have resulted in erratic rains and poor soil quality.

Renewable World is grateful to EWEA for their continued support. If your company is interested in making a difference to energy-poor communities by supporting our work then please contact: melanie.matthews@renewable-world.org.

RenewableUK Delegates Support Carbon Compensation

Managing and taking responsibility for your carbon emissions is an increasingly important part of running an efficient and sustainable business. As part of their commitment to sustainability, RenewableUK have continued to promote Renewable World's carbon compensation scheme to delegates attending their conferences. Carbon compensation is an alternative to traditional offsetting initiatives, which supports Renewable World's renewable energy projects providing sustainable development benefits as well as reducing carbon emissions.

In addition to making a corporate donation of £10,000 each year RenewableUK encourages support for Renewable World through their conferences which are attended by over 10,000 people from all over the world each year. Since



Renewable World is delighted to attend both EWEA and RenewableUK events

2010, delegates have had the opportunity to compensate for their travel emissions when booking their conference tickets online. Donations from conference attendees in 2011 totalled in excess of £2,000. We'd like to thank all of those who chose to carbon compensate – you can read more about the difference these donations have made to this year's carbon compensation project on page four and five.

If you or your company are concerned about the impact of your activities on the climate then why not commit to taking positive action in 2012? Our online carbon calculator will work out your carbon emissions and suggest how much you should donate to the work of Renewable World to help a community develop in a sustainable way, improving their access to health, education and income generation opportunities and enabling them to lift themselves out of poverty.



WIN £25 AMAZON VOUCHERS!

Over 6000 people receive New Energy Magazine, and we'd like to know more about our readers and what you think of New Energy. As a small charity it is important that we make the most of our communications, and ensure our supporters are well informed about our work and how they can help. So please complete our survey and post it to us, or if you prefer, fill out our online survey at www.tinyurl.com/NewEnergySurvey (it only takes 5 minutes and we'd really appreciate your feedback!). Please be honest – negative comments will not affect your chances of winning! All online and paper entries will have an equal chance of winning.

ABOUT NEW ENERGY

1. How did you receive New Energy?

- As an insert into Real Power
- Sent to my home/place of work
- Passed on to me by a friend or colleague
- Other (please explain)

2. Which articles did you read? Did you find them interesting?

Article	Very interesting	Quite interesting	Not interesting	Not read
Page 2 Editorial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Page 3 Viewpoint	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Page 3 News	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Page 4-5 Programme Focus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Page 6 Events Calendar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Page 6-7 Fundraising & Events	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. What do you like about New Energy?

4. What do you dislike about New Energy?

5. Is there anything you would like to see more or less of?

ABOUT YOU

6. Where do you work? (tick)

- Renewable Energy Industry
- Supplier to the Renewable Energy Industry
- Other (please tell us company name)

7. Have you ever supported Renewable World (or the Koru Foundation)? (tick all that apply)

- with a personal donation
- by running a marathon or other challenge event
- by buying from Amazon or other shops which donate a commission to Renewable World
- by carbon compensating (on our website or when booking a RenewableUK conference place)
- by raising money at work
- my company supports Renewable World
- Other (please describe)

8. Do you receive our monthly e-news?

- Yes
- No – not interested
- No but I would like to (please give email below)

Your contact details (feel free to remain anonymous but we do need to contact you if you would like to be entered into the Amazon voucher draw!):

Name: _____

Tel: _____

Email: _____

Please post your completed survey (original or photocopy is fine) to:
Freepost RSTT-UGJX-UKEZ, Renewable World, Community Base,
113 Queens Road, Brighton, BN1 3XG - or scan and email it to
info@renewable-world.org

