

CLEAN COOKSTOVES AND FUELS: A Catalog of Carbon Offset Projects and Advisory Service Providers 2ND EDITION



The information in this catalog was compiled by the Global Alliance for Clean Cookstoves (Alliance) for general information only. As of May 2014, there are more than 20 million households using cleaner, more efficient cookstoves and fuels. This catalog represents only a portion of the total number of projects implemented or cookstoves adopted globally. Project developers provided the project-specific information. The Alliance aims to keep this information current and accurate but makes no representations or warranties of any kind, express or implied, about the completeness, accuracy, reliability, suitability or availability with respect to the information or products contained in the document. We provide this information "as is" and you use the information at your own risk. In no event is the Alliance liable for any loss or damage including without limitation, indirect or consequential loss or damage, or any loss or damage whatsoever arising from loss of data or profits arising out of, or in connection with, the use of this document.



Every day, three billion people in the world cook their food on open fires or traditional cookstoves. They burn solid fuels such as wood, crop residues, dung, coal, and charcoal, producing smoke that kills more than four million people annually and sickens millions more. In addition to the enormous health toll, this cooking method carries an enormous environmental burden; the emissions from the combustion of unsustainably harvested wood fuel alone accounts for roughly 2% of global greenhouse gas emissions.

The result is that one of our most fundamental activities – cooking a meal – is a major global health and environmental issue, as well as a significant barrier to sustainable economic development. Though cleaner, more efficient cooking technologies have been developed, they are often out of reach for families in developing countries due to cost or lack of availability in their local marketplace.

Buying carbon offsets from cleaner, more efficient cookstoves can help change that, as a growing number of forward-thinking corporations are discovering. To help companies more easily navigate the carbon offset marketplace, the Global Alliance for Clean Cookstoves created the Clean Cooking Carbon Credit Catalog. The catalog highlights clean cooking projects¹ from around the world that offer companies and individuals the opportunity to offset 11 million tonnes of CO₂ over 2015 and 2016.



Purchasing carbon offsets or credits allows businesses to support low-carbon development in developing countries. In the clean cooking sector, offsets are helping to change the funding dynamic for cookstove projects from one that has traditionally relied on donor aid to one that attracts additional investment from the private sector. The revenues generated by the sale of offsets provides much needed funding to kick start the expanding clean cookstove market and helps to keep stove prices more affordable for the families using them.

Cleaner, more efficient cookstoves and fuels can offset one to two tonnes of carbon dioxide (CO₂) emissions per year, while also improving health, quality of life, and livelihoods. A recent report by the Gold Standard Foundation found that a single clean cookstove carbon offset delivers USD\$151 in additional social and economic benefits, such as:

HEALTH – Clean cookstoves and fuels are evidence-based, cost-effective methods to prevent and control chronic and acute health effects such as child pneumonia, lung cancer, chronic obstructive lung disease, heart disease, and burns at the global, regional, national, and local levels.

ECONOMIC DEVELOPMENT & WOMEN'S EMPOWERMENT – Women can participate in, own businesses around, and earn income from product design, engineering, manufacturing, maintenance, marketing, distribution, and sales of clean cookstoves and fuels.

LOCAL LIVELIHOODS & EDUCATION – More efficient cooking technologies can save households' time and money, often freeing up time to develop alternative livelihoods or receive an education.

It is an opportune time for more corporations to show climate leadership by offsetting their unavoidable emissions through clean cookstove carbon offset purchases. The Alliance's Clean Cooking Carbon Credit Catalog can help guide the way.

Sincerely,

Judh Mufful

RADHA MUTHIAH, Executive Director

1 The catalog of carbon offset projects has been developed to highlight projects on the market at the time of publication. Inclusion in the catalog does not imply an endorsement from the Alliance or its partners, and the catalog represents only a portion of the total number of projects implemented or cookstoves adopted globally. As of May 2014, there are more than 20 million households using cleaner, more efficient cookstoves and fuels.

CARBON OFFSET PROJECTS	3
	4
Summary: The Catalog By The Numbers	5
ATFICa Cameroon West Cameroon Improved Cookstoves	D
Congo-Brazzaville Programme "Filière Cuiseurs Economes" (FCE Congo)	
Côte d'Ivoire and Cameroon Côte d'Ivoire and Cameroon Efficient Cookstoves Programme of Activities	9
Ghana Gyapa Stoves: Improving the Lives of Families in Ghana	10
Ghana CookClean – Delivering Health and Carbon Impacts	11 12
Kenva Biogas from Cow Dung in the Nairobi River Basin. Kenva	13
Kenya Kick-Starting a Market for Ethanol Stoves	14
Kenya Improved Stoves in UK and European Supermarket Supply Chain	15
Kenya Aberdares Improved Cookstoves	10
Kenya Likoni and Shimoni Improved Cookstoves	18
Kenya Meru Improved Cookstoves	19
Kenya Shimba Hills Improved Cookstoves	20
Kenya West Kisumu Improved Cookstoves	21
Kenva. Tanzania and Uganda African Biogas Carbon Programme (ABC) – Part of the African Biogas Partnership Programme (ABPP).	23
Kenya Energy Efficient Cookstoves for Siaya Communities	24
Kenya Stoves for Life: Energy Efficient Cookstoves Project in Kakamega	25
Kenya Kenya Clean Cookstoves and Water Project	26
Kenya Oserian Maasai Cookstoves	27
Madagascar Solar and Efficient Stoves in Madagascar	29
Malawi Improved Cookstoves Programme for Rural Malawi/Mozambique	30
Malawi GS613 – Integrated Biomass Energy Conservation Project – Malawi	31
Nigeria Efficient Fuel Wood Stoves for Nigeria and Improved Cookstoves for Nigeria Programme of Activities	
Rwanda Improved Cookstoves Programme for Rwanda	34
Rwanda Tubeho Neza (Live Well).	35
Rwanda and Malawi GS1265 – African Biomass Energy Conservation PoA	36
Tanzania Dissemination of Fuel Efficient Biomass Stoves and Water Purification Systems in Tanzania	37 38
Uganda Improved Cookstoves for Social And Enviroinmental Impact in Uganda.	
Uganda Improved Cookstoves for East Africa (ICEA)	40
Uganda UpEnergy's Improved Cookstoves Carbon Project in Uganda	41
Acia	42
Cambodia New Lao Stove	44
China Sichuan Rural Poor-Household Biogas Development Programme	45
China Improved Heating and Cooking Project in China	46
China Longjie Wood Saving Stoves Project	4/
China Mengyin Solar Cooker Project	49
China Huining Solar Cooker Project	50
China Huzhu Tu Autonomous County Solar Cooker Project	51
India PoA for the Dissemination of "Top Lit Up Draft" (TLUD) Improved Cookstoves in India	52
India The bleating space improved cooksloves Programme of Activities	55
India The Chulika in South India	55
India Energy-Efficient Biomass Cookstoves and Biomass Fuel Pellets for Communal Kitchens in India	56
Myanmar Myanmar Stoves Campaign	5/
Vietnam Riogas Program in Vietnam: Riogas Program for Animal Husbandry Sector of Vietnam	50
Latin American	60
Bolivia and Paraguay Ecological Stoves for Better Living	61
Guatemala Stove Capital Guatemala Improved Stoves and Water Purification Project	62
Mondulas Proyecto Miliauol Mexico, El Salvador, Honduras and Guatemala <i>Utsil Nai</i> (Healthy Homes for All) Improved Cookstoves and Water Filters Diffusion Programm	03 e 64
Peru <i>Qori Q'oncha</i> (Golden Stove) Improved Cookstoves Diffusion Programme in Peru	65
	67
Introduction	60
Carbon Clear	09
Climate Focus	71
Climate Neutral Group	<u>7</u> 2
	73
UUZDalalite	/4 75
myclimate	76
Néxus	77
Numerco Limited	78
south pole group The CarbonNeutral Company	/ 9
ne easenteadar company	

CARBON OFFSET PROJECTS

What are carbon credits?

A carbon credit, or carbon offset, is the emission reduction equivalent of one tonne of carbon dioxide (CO_2) . A carbon credit could also reflect the reduction of other greenhouse gases (GHGs), such as methane or nitrous oxide. Due to the fact that each gas has a different impact on global warming (some gases have a greater impact than others), and in order to standardize the language and units, each gas is expressed in terms of its carbon dioxide equivalency (CO_2e) . Carbon credits are the "currency" of the carbon market and are issued as a result of the assessment after third party validation and verification in compliance with a certain methodology and a carbon standard.

Carbon Standards

GOLD STANDARD

DM)

For ten years, The Gold Standard Foundation has pioneered the way climate change is addressed. Their Reward for Results approach has channeled billions of Euros into 1000 low carbon development projects.

All Gold Standard projects must be implemented following best practice rules, consult with local stakeholders, continually reduce greenhouse gas emissions and improve the environment and people's lives. Once certified by The Gold Standard, projects issue carbon credits with independently audited climate and sustainable development outcomes. The purchase of these Verified Emission Reductions (VERs) – by governments, business, impact investors and individuals – provides on-going funding to projects.

This results-based finance principle shifts the emphasis to outputs rather than inputs or promises and gives the buyers of Gold Standard credits confidence that their money is making a real difference. The Gold Standard measures its success on the aggregated positive impacts that its projects deliver to thousands of local communities and the global environment.

UNFCCC CLEAN DEVELOPMENT MECHANISM (CDM)

The United Nations Framework Convention on Climate Change (UNFCCC) established the Clean Development Mechanism (CDM) to allow emission-reduction projects in developing countries to earn certified emission reduction (CER) credits, each equivalent to one tonne of carbon dioxide. The CDM has methodologies to produce CERs that are approved by regulators like the European Commission and can also be used for compliance with commitments made under the Kyoto Protocol, an international agreement that set binding targets for 37 developed nations to reduce their GHG emissions. CDM projects can additionally certify their sustainable development benefits to the Gold Standard, thus creating Gold Standard CERs.

AMERICAN CARBON REGISTRY (ACR)

Founded in 1996, the American Carbon Registry (ACR) is a non-profit enterprise of Winrock International. ACR currently has three published standards, all of which underwent scientific peer review. In 2012, ACR was approved as an Offset Project Registry for California's cap-and-trade program, under which it will help oversee the listing, verification and, issuance of offsets being developed using the California Air Resources Board's compliance or early-action offset protocols.

VERIFIED CARBON STANDARD (VCS)

Founded in 2005 by the Climate Group, the International Emissions Trading Association, the World Economic Forum, and the World Business Council for Sustainable Development, the Verified Carbon Standard has become one of the world's most widely used carbon accounting standards, which now aims to pioneer efforts to develop standardized methods that will streamline the project approval process, reduce transaction costs and enhance transparency. Across the world, projects using the VCS Standard have issued more than 120 million offsets.

SUMMARY: THE CATALOG BY THE NUMBERS





Clean Cooking Carbon Credit Catalog





CAMEROON WEST-CAMEROON IMPROVED COOKSTOVES



7

CO2BALANCE is a UK-based project developer, consultant and offset retailer that specialize in domestic energy efficiency offset projects in developing countries. We focus on introducing efficient wood cookstoves to households in areas of high stresses on natural resources, such as West Cameroon. This project in West Cameroon is a landmark collaboration between CO2balance and the African Centre for Renewable Energy & Sustainable Technology (ACREST). Together we have designed the "Sweet Mother Stove", in a bid to improve lives in West Cameroon.

PROJECT BENEFITS: The West Region is 14,000 km² of territory located in the central-western portion of the Republic of Cameroon. This area is a zone of fertile volcanic soil, which contributes to its reputation as a food basket for major urban areas (Douala and Yaoundé the nation's capital). West Region is the smallest of Cameroon's ten regions in size, yet it has the highest population density, therefore greatest demand on natural resources. Deforestation is a huge concern in West Cameroon. Sweet Mother Stoves seek to reverse the deforestation trend thereby: reducing carbon emissions; reducing time spent collecting wood for cooking; reducing time spent cooking; along with a range of social and health benefits.

"Many households have already been held highlighting the benefits of using the 'Sweet Mother Stove'. Madame Lontsie Ernestine (seen in the above picture) has been using the improved stove for four years to cook for sometimes as many as 14 people in her extended family. She compared the amount of wood she used to burn to cook on the three stone fire to the amount she needed on the Sweet Mother Stove – "today I needs only three pieces of wood instead of 15 pieces to cook the same meal".

WHY CARBON REVENUES ARE ESSENTIAL: Carbon revenue is used to fund future stove subsidization, delivery, installation and maintenance of stoves over the course of the programme. Carbon revenue will be used to organically allow ACREST to grow as a provider of sustainable energy solutions across Cameroon and West Africa. We also use carbon revenues to fund marketing and web development campaigns, and a team of maintenance and support officers that work with ACREST to help with the future maintenance of the Sweet Mother Stove. ACREST and CO2balance teams will ensure that stoves are kept in good working order into the future, as this project goes from strength to strength.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/



CONGO-BRAZZAVILLE PROGRAMME "FILIÈRE CUISEURS ECONOMES" (FCE CONGO)



INITIATIVE DÉVELOPPEMENT (ID) has operated in the republic of the Congo since 2005. The "FCE" programme in Brazzaville aims at creating and helping the structuring of production and supply chain of wood/charcoal saving cook-stove called the "Congo-Mboté". Six local producers are currently producing cookstoves and 1,300 cookstoves have been sold around the city through a network of 15 local retailers. This project is the first of ID's cookstove project, but it is now inspiring two similar programs in Chad and Comoros that will start in 2015.

PROJECT BENEFITS: While the pressure on the wood resource is worrying, there was no local solution in Brazzaville to reduce wood consumption. ID started from scratch the implementation of a local network of production and distribution of improved cookstoves. ID's main concern is to help the structuring of a local network, with empowered economic players.

The stove is produced by local craftsmen and is available in the capital at an affordable price. Designed for a wood or charcoal purpose, the stove reduces the pressure on wood resources, creates new sources of income for local craftsmen, allows families and small businesses to save money on their daily charges, and has health benefits on users and their families. About 5000 urban households and 500 professional users of wood fuel are to benefit from our project before the end of 2018.

"I had to buy 80 bundles of wood per month for my restaurant. With the improved stove, I need only 30 and I save nearly 15,000 FCFA (22 €) per month."

-MA LYDIE, Congo Brazzaville

WHY CARBON REVENUES ARE ESSENTIAL: The carbon revenues are reinvested in the project so as to ensure the durability of our actions in the long-run. More specifically, they will enable us to cover the promotion of the improved cookstoves, the follow-up and the salaries of craftsmen's trainer. They will also enable us to further invest in Research and Development activities to develop new models of improved stoves.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/1713/



CÔTE D'IVOIRE AND CAMEROON CÔTE D'IVOIRE AND CAMEROON EFFICIENT COOKSTOVES PROGRAMME OF ACTIVITIES



ESTIMATED CREDITS 34,500 tCO₂ 65,000 tCO₂

STOVES DISTRIBUTED TO-DATE: 10,000



ENVIROFIT is a social enterprise that designs, produces, and sells efficient, durable and affordable cookstoves that create environmental, health, and social impacts for homes and institutions in developing nations. Envirofit uses carbon finance to subsidize the cost of cookstoves to consumers. Envirofit has sold more than 850,000 stoves, impacting more than 4.2 million lives across 45 countries.

PROJECT BENEFITS: The goal of the Programme of Activities (PoA) is to enable the large-scale distribution of high efficiency biomass cookstoves in Côte d'Ivoire and Cameroon. Cookstove sales create jobs and influence regional markets and local entrepreneurs. Envirofit creates opportunities for new and existing local businesses to boost the economy on a regional level and create a sustainable channel of distribution. The carbon finance serves to partially subsidize the cost of cookstoves to allow for market-based pricing making the cookstoves more affordable for families. Envirofit fosters local entrepreneurs to establish new businesses selling, monitoring and evaluating the impact of the stoves. The PoA will have multiple benefits of reducing global greenhouse gas emissions, reducing pressure on forests and woody biomass resources, reducing indoor air pollution associated with use of traditional stoves and freeing up income that can be used for other purposes by reducing the expenditures of households, communities and/or small businesses on fuel for cooking.

"It is very economical. I have 8 children, and before I was purchasing a bag of charcoal once every month. Since using the stove I now only purchase a bag every two months." -CÔTE D'IVOIRE CUSTOMER & ENTREPRENEUR

WHY CARBON REVENUES ARE ESSENTIAL: Envirofit adopts an innovative approach to carbon finance that enables the end user of its efficient stove technologies to take advantage of carbon finance in advance of it being accrued. We invest our own capital and arrange high impact development loans to subsidize the market price of the stove at the point of sale. This means that customers buy the stove at a heavily reduced rate, often below the cost price. The loan attributable to each stove sale is paid back via the sale of carbon credits that are generated by the stoves over their lifetime. The stove customer waives their rights to this carbon revenue in return for receiving the stoves at the subsidized price, but agrees to participate in the project monitoring plan. Envirofit therefore takes on the risks associated with carbon finance, but passes the benefit risk-free on to the stove user at the point of sale.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/2060/

contact NICK MARSHALL NICK.MARSHALL@ENVIROFIT.ORG WWW.ENVIROFIT.ORG



GHANA GYAPA STOVES: IMPROVING THE LIVES OF FAMILIES IN GHANA



CLIMATECARE and Relief International began working together in 2007, unlocking funding for this pioneering cookstove project in Ghana through the sale of carbon credits.

Relief International provides training, quality control services, strategic investment and distributes the stoves through a wide network of retailers. Carbon finance is used to support local business through production working capital support, marketing, business and technical training and capital investment.

Organisations who purchase Gold Standard carbon credits to support this project to offset their own unavoidable carbon emissions and can use the LBG framework to report the number of lives they improve through this investment.

PROJECT BENEFITS: This project introduces an insulated and efficient cookstove, to families in Ghana. The Gyapa cooks food more quickly, requires 50-60% less fuel and is less smoky. As such it both cuts carbon emissions and improves health by reducing exposure to toxic fumes.

Gyapa is 100% produced in Ghana by local artisans. The project empowers local entrepreneurs and stimulates the local economy by creating jobs and developing skills, providing specialist training to groups of accredited manufacturers.

- Cuts fuel costs: 2.4 million people have saved over \$60 million.
- Employment generation: Over 12,500 stoves are produced each month through 300 manufacturers. Over 500 retailers benefit from selling the Gyapa stove.
- Improves health: Reduces exposure to hazardous air pollutants improving health of cooks, typically mothers and children.
- Scale and impact: Over 768,000 stoves sold, saving more than 1,600,000 tonnes of CO₂ emissions.
- Protects forests: Ghana has one of the highest deforestation rates in Africa.

"My Gyapa saves me a sack of charcoal each week and is fast and clean. Charcoal prices keep going up, but my Gyapa keeps saving me cash so I can make more money from my cooking business for my family." -REGINA KUORKOR, Market Food Stall Entrepreneur

WHY CARBON REVENUES ARE ESSENTIAL: Using carbon revenue, Gyapa has the largest social impact of any cookstove program in the world. Relief International has used carbon income to invest in the Gyapa Stove Supply Chain resulting in:

• ten-fold increase in local Gyapa stove production and sales since 2008;

10

- incomes gains of over US \$68 million from employment and fuel savings for low income households; and
- reduced exposure to dangerous indoor air pollution for over 700,000 families; especially women and children.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/2324/

 contact
 ROBERT STEVENS, CLIMATECARE
 ROBERT.STEVENS@CLIMATECARE.ORG
 WWW.CLIMATECARE.ORG
 T: +44(0)1865 591000

 contact
 ANN KOONTZ, RELIEF INTERNATIONAL
 ANN.KOONTZ@RI.ORG
 WWW.GYAPA.COM
 T: (202) 639-8660



GHANA COOKCLEAN – DELIVERING HEALTH AND CARBON IMPACTS



STOVES DISTRIBUTED TO-DATE: 35,000



CLIMATECARE works with social enterprise CookClean to improve the social, environmental and economic conditions of low-income families in Ghana. ClimateCare structured finance for and invested in this local Ghanaian business, which now manufactures an advanced yet affordable model of highly efficient charcoal burning stove in Accra and sells them to households nationwide.

PROJECT BENEFITS: The CookMate stove is highly efficient, cutting fuel requirements by over 50% – this is due to the innovative burning chamber and the pot "skirt" which ensures that as much heat is possible is delivered to the cooking pot. Reductions in emissions also improve health by cutting indoor air pollution.

The project is registered under the Clean Development Mechanism and so provides an opportunity for both organisations with a compulsory or voluntary requirement to reduce carbon emissions to deliver their commitments through a project that cuts carbon and also creates measurable community benefits. The Swedish Energy Agency is one such example and has committed to purchase the first 500,000 CERs.

Key benefits of the programme:

- Improves disposables incomes.
- Protects the environment Potential to cut 1 million tonnes of CO2 emissions over 7 years and potentially reduce black carbon.
- Slows deforestation Halving fuel requirements and protecting Ghana's vulnerable forests.
- Empowers women Cleaner cooking reduces illness and frees up time for work and study. There are also many female entrepreneurs selling the stoves.
- Creates Jobs Supporting a local entrepreneur to grow the business manufacturing and retailing stoves.

"The Swedish Government is committed to purchasing CERs from projects that have measurable outcomes for their host communities and where a fair carbon price is central to the project's success. Having analysed a large number of efficient cooking stove projects, we are delighted to sign this first transaction with ClimateCare." -CHRISTIAN SOMMER. Swedish Energy Agency

WHY CARBON REVENUES ARE ESSENTIAL: The project is an excellent demonstration of how carbon markets can deliver both emissions reductions and sustainable development outcomes while supporting transformational local enterprise

The finance generated through carbon credit sales is invested to scale up operations and outreach through activities including marketing and awareness raising, capacity building to expand distribution and after sales service and maintenance.

Those who purchase carbon credits from this project can report lives improved using the LBG framework.

There is also opportunity to support new projects through carbon finance or upfront investment, as ClimateCare develops new projects under the agreed Programme of Activities.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/2324/



GHANA AND NIGERIA AFRICAN IMPROVED COOKSTOVES PROGRAMME OF ACTIVITIES



ENVIROFIT is a social enterprise that designs, produces, and sells efficient, durable and affordable cookstoves that create environmental, health, and social impacts for homes and institutions in developing nations. Envirofit uses carbon finance to subsidize the cost of cookstoves to consumers. Envirofit has sold more than 850,000 stoves, impacting more than 4.2 million lives across 45 countries.

PROJECT BENEFITS: The goal of the Programme of Activities (PoA) is to enable the large-scale distribution of high efficiency biomass cookstoves in Ghana and Nigeria. Cookstove sales create jobs and influence regional markets and local entrepreneurs. Envirofit creates opportunities for new and existing local businesses to boost the economy on a regional level and create a sustainable channel of distribution. The carbon finance serves to partially subsidize the cost of cookstoves to allow for market-based pricing making the cookstoves more affordable for families. Envirofit fosters local entrepreneurs to establish new businesses selling, monitoring and evaluating the impact of the stoves. The PoA will have multiple benefits of reducing global greenhouse gas emissions, reducing pressure on forests and woody biomass resources, reducing indoor air pollution associated with use of traditional stoves and freeing up income that can be used for other purposes by reducing the expenditures of households, communities and/or small businesses on fuel for cooking.

"When I used to prepare Banku I used 1 Cedi of Charcoal. Here I use less than 50 cents worth and it cooks as fast as LPG." –GHANAIAN CUSTOMER

WHY CARBON REVENUES ARE ESSENTIAL: Envirofit adopts an innovative approach to carbon finance that enables the end user of its efficient stove technologies to take advantage of carbon finance in advance of it being accrued. We invest our own capital and arrange high impact development loans to subsidize the market price of the stove at the point of sale. This means that customers buy the stove at a heavily reduced rate, often below the cost price. The loan attributable to each stove sale is paid back via the sale of carbon credits that are generated by the stoves over their lifetime. The stove customer waives their rights to this carbon revenue in return for receiving the stoves at the subsidized price, but agrees to participate in the project monitoring plan. Envirofit therefore takes on the risks associated with carbon finance, but passes the benefit risk-free on to the stove user at the point of sale.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/2060/



KENYA BIOGAS FROM COW DUNG IN THE NAIROBI RIVER BASIN, KENYA



ATMOSFAIR is a climate protection organization focusing on travel. We actively protect the climate by offsetting greenhouse gases through offset projects developed and financed in house, particularly clean cookstove technologies.

PROJECT BENEFITS: Through this project dairy farmers in the Nairobi River Basin are supported in producing regenerative biogas for cooking with small biogas units. This reduces the consumption of firewood, gas and kerosene and thus helps against deforestation, poverty, production of local greenhouse gases and indoor air pollution. The biogas units run on cow dung and other agricultural wastes which are available for free. As by-product the high nutritive slurry can be used as an agricultural fertilizer. Another additional important feature of this project is the creation of jobs in the construction and maintenance of the biogas units.

"Today I can cook with my biogas and do not collect wood any longer, the biogas unit also produces good fertilizer which is good for the elephant grass I grow for my cows." –DAIRY FARMER, Near Nairobi/Kenya

WHY CARBON REVENUES ARE ESSENTIAL: The carbon revenues are used to reduce the price of the biogas units and make them available for many poor households.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/2014/



KENYA KICK-STARTING A MARKET FOR ETHANOL STOVES



For this first of its kind project – winner of Environmental Finance Carbon Finance Transaction of the Year 2015 – **CLIMATECARE** brought together UK-AID and Safi International along with its partner the Umande Trust.

ClimateCare developed innovative financial mechanisms to make stoves affordable. This initial project will help develop a commercial market for ethanol fuel, providing a lasting legacy for those who invest.

PROJECT BENEFITS:

14

ClimateCare is helping kickstart a new market for clean cooking using a waste product from sugar production. Ethanol fuel is clean burning, cutting out indoor air pollution and each stove saves 5t CO₂ a year.

- Innovation Award winning project with potential to change the way people cook, for good.
- Improved health Ethanol fuel cuts out indoor air pollution, saving lives. Report lives improved using the LBG framework.
- Emissions reduction Each cooker saves 5t CO_2 /year. Stoves turn on and off instantly, so no waste.
- Slowing deforestation Ethanol replaces charcoal, protecting forests.
- Empowering women Clean, convenient cooking reduces illness and frees up time for work and study.
- Adding value New distribution for fuel and stoves creates jobs and adds value along the supply chain.
- Circular economy Ethanol a waste project from Kenya's sugar industry is put to good use.

"I love safi cooker. I have one, and it has helped me since I was asthmatic and that smoke was affecting me. Thank you for saving me."

-TRIZA OKODE, Kibera, Kenya

WHY CARBON REVENUES ARE ESSENTIAL: This project is a blueprint for effective use of carbon finance. ClimateCare put in place award-winning financial mechanisms. A Revolving Fund makes ethanol cookers affordable to the community while the sale of carbon credits tops up the fund, allowing it to reach more people.

ClimateCare expect this project to scale quickly, reaching 10,000 families in 2015. There is also opportunity to support new projects through carbon finance or upfront investment, as this concept is rolled out in other regions.

In cooperation with UNHCR this project is providing cookers in Dadab Refugee Camp, Kenya. UNHCR resources are limited – and purchasing carbon credits enables the project to scale and reach more refugees.

Those purchasing carbon credits from this project will leave a lasting legacy, supporting creation of a new market with global potential. Buyers of credits can report lives improved using the LBG framework.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/2324/



KENYA IMPROVED STOVES IN UK AND EUROPEAN SUPERMARKET SUPPLY CHAIN



CLIMATECARE, working with UKAID and Finlays Horticulture Fairtrade Association, is building resilience within the UK & European supermarket supply chain.

This project uses innovative financial mechanisms to make efficient cookstoves available to agricultural workers. The initial cost is subsidies and then through a Revolving Fund, provides an interest free loan to assist purchase. The money is used multiple times, making the stoves accessible to a greater number of people.

In this way, low income agricultural workers in Naivasha and Timau can afford efficient cookers that cut fuel requirements in half, saving money and improving health.

PROJECT BENEFITS: At least 8,000 families are set to benefit through 2015. This project uses innovative financial mechanisms to make efficient cookstoves available to agricultural workers. The initial cost is subsidies and then through a Revolving Fund, provides an interest free loan to assist purchase. The money is used multiple times, making the stoves accessible to a greater number of people. In this way, low income agricultural workers in Naivasha and Timau can afford efficient cookers that cut fuel requirements in half, saving money and improving health.

Workers benefit from the positive health impacts of a more efficient stove and will save £125 in fuel costs every year. The business benefits from a healthier, happier workforce.

Key benefits of the programme are:

- Economic Savings Supply chain workers expected to save £125 each on fuel costs every year.
- Improved Health The project will improve the health of over 40,000 people.
- Empowering women Stoves cook cleaner and quicker reducing illness and freeing up time for work and study.
- Emissions reduction This project will cut around 10,000 tonnes of CO₂ per year, growing as the project expands.
 Slowing deforestation Stoves require 50% less charcoal, helping protect local forests.

"Projects like this are a great way to make your international supply chain more efficient, reduce energy consumption and at the same time improve life for the people your business relies on."

WHY CARBON REVENUES ARE ESSENTIAL: The ClimateCare measures the outcomes of this project, including carbon reductions, and will generate revenue through the sale of carbon credits. Money raised will replenish the Revolving Fund, ensuring long-term sustainability and expansion of the project across the farm workforce community.

Finlays export fruit, vegetables and flowers to Europe and the UK. This project will therefore have particular resonance for retailers and manufacturers who buy these products. For them, purchasing carbon credits through this project they will not only improve people's lives and reduce carbon emissions, it is an investment into their own supply chain, building positive relations and resilience.

ClimateCare can also develop similar projects in your own supply chain.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/2324/

contact ROBERT STEVENS BUSINESS@CLIMATECARE.ORG WWW.CLIMATECARE.ORG T: +44(0)1865 591 027



KENYA ABERDARES IMPROVED COOKSTOVES



16

CO2BALANCE is a UK-based project developer, consultant and offset retailer that specialize in domestic energy efficiency offset projects in developing countries. We focus on introducing efficient wood cookstoves to households in remote rural areas that cannot afford to pay for efficient cooking technology. We have distributed 61,904 of our in-house designed, African built stoves.

PROJECT BENEFITS: The Aberdares Range located in the central province of Kenya forms part of the Great Rift Valley and is characterized by a diverse array of ecosystems including montane humid forest, sub montane forest, bamboo forests and moorland. Notably, the area is host to one of the last refuges of the black rhino which is listed as critically endangered species by the International Union for Conservation of Nature. Most households in Aberdares are heavily dependent on wood fuel and traditional three stone fires for cooking. This has led to increased pressure on local fuel resources and habitats which are vital for sustaining the local wildlife. Furthermore, three stone fires are a major cause of respiratory diseases especially among women and children who are generally responsible for kitchen duties. The Aberdares Improved Cookstove project is helping to reduce fuel consumption and the negative impacts associated with three stone fire cooking through the distribution of highly efficient, locally manufactured cookstoves. Additionally the project has contributed positively to local employment opportunities through the manufacture, distribution and monitoring of the stoves.

"The project is important to us as it reduces the amount of money we spend on fuel and helps to protect the environment-good work CO2balance."

-MARGARET KAHAKI, stove owner

WHY CARBON REVENUES ARE ESSENTIAL: We use carbon revenue to fund the stove construction, delivery, installation and maintenance of stoves over the course of the programme. We also use carbon revenues to fund a team of maintenance and support officers who are based in and recruited from the communities in which we work. The maintenance and support officers ensure that stoves owned by beneficiaries remain in good working order and any faults or breakdowns are fixed in a timely manner.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/2154/



KENYA **KISUMU IMPROVED COOKSTOVES**



CO2BALANCE is a UK-based project developer, consultant and offset retailer that specialize in domestic energy efficiency offset projects in developing countries. We focus on introducing efficient wood cookstoves to households in remote rural areas that cannot afford to pay for efficient cooking technology. We have distributed 61,904 of our in-house designed, African built stoves.

PROJECT BENEFITS: Kisumu is Kenya's third largest city and the most important Kenyan city situated on Lake Victoria, the largest tropical lake in the world. Kisumu is one of the fastest growing cities in Kenya, surrounded by many sugar and rice plantations – all of which take advantage of the immense natural water resource located nearby. Unfortunately, other natural resources are insufficient to support the fast-growing population and in particular fuelwood supply and demand is in serious deficit. This is mostly because the reachable collection area for fuelwood is limited by the presence of Lake Victoria to the west of the city. This project was designed to help alleviate the high pressure on fuelwood resources by introducing 9,530 stoves that reduce the demand for fuelwood by over 50%.

"The success of the CZ stove in this household began with the challenge we were facing on fuel. Once I received it, I realised it is decent, efficient and fuel effective."

-LILLIAN AKOTH OPIYO, stove owner

WHY CARBON REVENUES ARE ESSENTIAL: We use carbon revenue to fund the stove construction, delivery, installation and maintenance of stoves over the course of the programme. We also use carbon revenues to fund a team of maintenance and support officers who are based in and recruited from the communities in which we work. The maintenance and support officers ensure that stoves owned by beneficiaries remain in good working order and any faults or breakdowns are fixed in a timely manner.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/2154/



KENYA LIKONI AND SHIMONI IMPROVED COOKSTOVES



CO2BALANCE is a UK-based project developer, consultant and offset retailer that specialize in domestic energy efficiency offset projects in developing countries. We focus on introducing efficient wood cookstoves to households in remote rural areas that cannot afford to pay for efficient cooking technology. We have distributed 61,904 of our in-house designed, African built stoves.

PROJECT BENEFITS: Our field staff are employed from local communities in this project, which ensures that we are well placed to respond to the needs of the local stakeholders via additional funding resources (e.g., CSR). In March 2013, CO2balance successfully connected SCC's "Challenge Africa" team and the local Shikaadabu Primary School so a new fence could be erected around the school. The site visit at the school was rewarding for both our client and to our local stakeholders therefore further pledges were made to continue this cooperation. CO2balance is proud to facilitate such voluntary donations in the Likoni project area as it directly helps our current stove users and the communities where we operate.

"My sister in Ukunda was given a stove by CO2balance months ago. I have not visited it yet, but my sister is very happy about this. The other women in the village are also happy. They say it looks very nice, and that it cooks very well. I think it is very good that you have come to us now."

-MARY OCAMA, Stakeholder Meeting Attendee

WHY CARBON REVENUES ARE ESSENTIAL: We use carbon revenue to fund the stove construction, delivery, installation and maintenance of stoves over the course of the programme. We also use carbon revenues to fund a team of maintenance and support officers who are based in and recruited from the communities in which we work. The maintenance and support officers ensure that stoves owned by beneficiaries remain in good working order and any faults or breakdowns are fixed in a timely manner.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/2154/

18



KENYA MERU IMPROVED COOKSTOVES



19

CO2BALANCE is a UK-based project developer, consultant and offset retailer that specialize in domestic energy efficiency offset projects in developing countries. We focus on introducing efficient wood cookstoves to households in remote rural areas that cannot afford to pay for efficient cooking technology. We have distributed 61,904 of our in-house designed, African built stoves.

PROJECT BENEFITS: The altitude of Meru South Ranges from 5200 meters above sea level at the peak of Mt. Kenya to 600 meters in the lower areas; with the topography of the district being heavily influenced by the volcanic activity of Mt. Kenya. The population has dramatically increased over recent years, in part to do with the fertile soils and favourable conditions in the area; leading the average size of land parcels to shrink by an alarming rate. As a result poverty is one of the major development challenges the district is facing. This project was designed to provide access to improved cook-stoves to some of the regions poorest communities while simultaneously providing employment opportunities to young people.

"Prior to receiving this good stove my cows always bellowed because I did not have enough time to feed and water them. This is because after picking tea, I used to travel long distances to fetch firewood therefore lacking required time to feed and water them. As a result, the amount of milk produced was not enough for the family and for sale."

WHY CARBON REVENUES ARE ESSENTIAL: We use carbon revenue to fund the stove construction, delivery, installation and maintenance of stoves over the course of the programme. We also use carbon revenues to fund a team of maintenance and support officers who are based in and recruited from the communities in which we work. The maintenance and support officers ensure that stoves owned by beneficiaries remain in good working order and any faults or breakdowns are fixed in a timely manner.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/2154/



KENYA SHIMBA HILLS IMPROVED COOKSTOVES



CO2BALANCE is a UK-based project developer, consultant and offset retailer that specialize in domestic energy efficiency offset projects in developing countries. We focus on introducing efficient wood cookstoves to households in remote rural areas that cannot afford to pay for efficient cooking technology. We have distributed 61,904 of our in-house designed, African built stoves.

PROJECT BENEFITS: This project borders both Tsavo East National Park and the Shimba Hills National Reserve; Tsavo East is one of the world's largest game reserves and Shimba Hills one of the largest coastal forest areas in East Africa - famed for its extraordinary diversity of plant life. Both reserves are surrounded by poor farming communities whose large wood fuel consumption on three stone fires put the nearby protected, fragile ecosystems under increasing pressure as wood supplies outside the parks are being depleted. This project was designed to introduce a locally-built efficient cookstove to combat this threat, increase employment opportunities and reduce negative health impacts from cooking over smoky, inefficient 3 stone fires.

"I have learnt a lot about how to consume less fuel, this will help cut costs-I think CO2balance is doing a good job." -VEN BERNARD MWASI, stove owner

WHY CARBON REVENUES ARE ESSENTIAL: We use carbon revenue to fund the stove construction, delivery, installation and maintenance of stoves over the course of the programme. We also use carbon revenues to fund a team of

lation and maintenance of stoves over the course of the programme. We also use carbon revenues to fund a team of maintenance and support officers who are based in and recruited from the communities in which we work. The maintenance and support officers ensure that stoves owned by beneficiaries remain in good working order and any faults or breakdowns are fixed in a timely manner.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/2154/

20



KENYA WEST KISUMU IMPROVED COOKSTOVES





CO2BALANCE is a UK-based project developer, consultant and offset retailer that specialize in domestic energy efficiency offset projects in developing countries. We focus on introducing efficient wood cookstoves to households in remote rural areas that cannot afford to pay for efficient cooking technology. So far we have distributed over 60,000 of our in-house designed, African built stoves throughout Kenya.

PROJECT BENEFITS: West Kisumu is located in Nyanza province on the suburbs of Kenya's third largest city. The region is recognized as one of the poorest in Western Kenya with over 45% of the population living in extreme poverty. Despite being endowed with a wealth of natural resources, rapid population growth combined with a dependence on biomass fuel for cooking has resulted in wide-scale deforestation. This project seeks to alleviate pressures on local fuel supplies and reduce health risks associated with cooking on open fires, through the dissemination of over 1,500 efficient locally built cookstoves. Moreover, a key benefit of this project has been the creation of a locally based women's cookstove enterprise managed by the Umeme Women's Group.

"The CO2balance project has changed our lives. As a result of the training we received, we feel empowered and the money generated from the stove sales has enabled us to support our families and pay our children's school fees."

-LOISE, Leader of Umeme Women's Group

WHY CARBON REVENUES ARE ESSENTIAL: Carbon revenues are used to fund the stove construction, delivery, installation and maintenance of stoves. We also use carbon revenues to fund a team of field officers who are based in and recruited from the communities in which we work.

PROJECT DEVELOPER PROFILE: http://cleancookstoves.org/partners/item/24/215

21



KENYA AND SOUTH AFRICA IMPROVED COOKSTOVES PROGRAMME OF ACTIVITIES IN AFRICA



ENVIROFIT is a social enterprise that designs, produces, and sells efficient, durable and affordable cookstoves that create environmental, health, and social impacts for homes and institutions in developing nations. Envirofit uses carbon finance to subsidize the cost of cookstoves to consumers. Envirofit has sold more than 850,000 stoves, impacting more than 4.2 million lives across 45 countries.

PROJECT BENEFITS: The goal of the Programme of Activities (PoA) is to enable the large-scale distribution of high efficiency biomass cookstoves in Kenya and South Africa. Cookstove sales create jobs and influence regional markets and local entrepreneurs. Envirofit creates opportunities for new and existing local businesses to boost the economy on a regional level and create a sustainable channel of distribution. The carbon finance serves to partially subsidize the cost of cookstoves to allow for market-based pricing making the cookstoves more affordable for families. Envirofit fosters local entrepreneurs to establish new businesses selling, monitoring and evaluating the impact of the stoves. The PoA will have multiple benefits of reducing global greenhouse gas emissions, reducing pressure on forests and woody biomass resources, reducing indoor air pollution associated with use of traditional stoves and freeing up income that can be used for other purposes by reducing the expenditures of households, communities and/or small businesses on fuel for cooking.

"Our chef would begin cooking at 6 am and often lunch would not be ready for the children until 1 pm. Now she starts at 10 am and never misses a meal." "With the new institutional stove we can cook a meal for 300 students with just three pieces of wood."

TITUS KTOKO, Kenyan school headmaster and the first recipient of the institutional stove

WHY CARBON REVENUES ARE ESSENTIAL: Envirofit adopts an innovative approach to carbon finance that enables the end user of its efficient stove technologies to take advantage of carbon finance in advance of it being accrued. We invest our own capital and arrange high impact development loans to subsidize the market price of the stove at the point of sale. This means that customers buy the stove at a heavily reduced rate, often below the cost price. The loan attributable to each stove sale is paid back via the sale of carbon credits that are generated by the stoves over their lifetime. The stove customer waives their rights to this carbon revenue in return for receiving the stoves at the subsidized price, but agrees to participate in the project monitoring plan. Envirofit therefore takes on the risks associated with carbon finance, but passes the benefit risk-free on to the stove user at the point of sale.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/2060/



KENYA, TANZANIA AND UGANDAAFRICAN BIOGAS CARBON PROGRAMME (ABC) –PART OF THE AFRICAN BIOGAS PARTNERSHIP PROGRAMME (ABPP)



NUMBER OF ISSUED CREDITS CURRENTLY AVAILABLE FOR SALE: - tCO₂

ESTIMATED FUTURE ISSUANCES FOR SALE			
YEAR	2015 & 2016	2017	
ESTIMATED CREDITS			
KENYA	130,000 tCO ₂	70,000 tCO ₂	
TANZANIA	90,000 tCO ₂	50,000 tCO ₂	

TOTAL BIOGAS DIGESTERS DISTRIBUTED TO-DATE: 25,215



23

THE AFRICAN BIOGAS PARTNERSHIP PROGRAMME (ABPP) is a Private Public Partnership between the Netherland's Directorate-General for International Cooperation (DGIS), Hivos and SNV. Both Hivos and SNV are not-for-profit international development organisations. Hivos seeks new solutions to persistent global issues, and supports people to build green economies through their own resource-based energy solutions. Through working closely with local partners, SNV equips communities, businesses and organisations with the tools, knowledge and connections they need to increase their income and gain access to basic services. Together, we aim to support the growth of a commercially viable, market-orientated biogas sector in Kenya, Tanzania, Uganda, Ethiopia and Burkina Faso. We work in close collaboration with local partners and stakeholders with respect for local knowhow, traditions and culture.

PROJECT BENEFITS: The benefits of biogas to farmers are two-fold: it provides a source of clean renewable fuel and an organic fertilizer (bioslurry), which can be used to improve soils and crop yields leading to greater income for produce. Cooking on biogas is fast and smokeless, benefiting the health of users, especially women and children, and eliminating the need to spend time collecting fuelwood. In addition, the programme offers extensive vocational training and skills development for biogas masons, allowing them to work as entrepreneurs in a growing sector, and providing employment opportunities to a wide range of stakeholders across the biogas supply chain. Implementation is enhanced by an extensive partner network, making it possible to reach disparate regions and rural communities. More than 46,000 families have benefited from biogas through the ABPP to date!

"This programme is an excellent example of the latest vision on international cooperation, as it combines investment, trade and to a smaller extent grants, enabling improved standard of living."

-MS. LILIANNE PLOUMEN, Dutch Minister for Foreign Trade and Development Cooperation

WHY CARBON REVENUES ARE ESSENTIAL: Between 2009 and 2014 over 14,000 biodigesters have been built in Kenya, and another 11,000 in Tanzania. In order to provide the people of Kenya and Tanzania with more clean kitchens and greener and productive fields, another 27,500 are planned by the end of 2017 in Kenya and 20,700 biodigesters in Tanzania.

Income from carbon finance is used to support the overall expansion of the programme, helping to make biogas more affordable to farmers and ensure they have access to a well-functioning support network should repairs be needed.

Hivos welcomes retailers who want to join us in enlarging our successful biogas programme. We are offering exclusivity for companies or organisations that want to buy the whole expected volume of our carbon credits.

PROJECT DEVELOPER PROFILE: http://cleancookstoves.org/partners/item/16/607



KENYA ENERGY EFFICIENT COOKSTOVES FOR SIAYA COMMUNITIES



MYCLIMATE, a non-profit foundation based in Switzerland, is one of the world's leading providers of voluntary carbon offsetting measures. myclimate takes care of the project's entire carbon certification process and has successfully issued credits from this project. For the coordination and implementation of this project myclimate works with the local community-based organization Tembea Youth Center for Sustainable Development based in Ugunja, Kenya.

PROJECT BENEFITS: The efficient cookstove is a fix-installed rocket stove replacing the inefficient three-stone fires in rural households in Siaya County, Kenya. Local artisans are identified in the villages and trained in stove construction using locally available materials. The project applies an innovative village-based community savings and loaning mechanism to enhance the affordability of and access to improved stoves through interest-free loans. The project has had the following impact to date: installation of over 22,000 cookstoves; annual wood savings of over 30,000 tonnes thereby reducing deforestation; training of 90 local artisans and providing income to over 120 persons; over 100,000 people benefiting from clean and efficient cooking; 280 hours time savings per household per year due to reduced fuel consumption; better indoor air quality in households to improve health; over 900 micro-finance groups with over 22,000 members established leading to financial empowerment of local communities.

"Tembea started community saving and loaning as a methodology to assist community members have a way of repaying efficient cookstoves. So we train them and they have a leadership component comprised of chairperson, secretary, treasurer. This is a methodology that enhances the capacity of the community to mobilize resources."

-JOSHUA OMONDI AMOLLO, Tembea Project manager Saving and Loaning Groups

WHY CARBON REVENUES ARE ESSENTIAL: Carbon finance provides the additional funds for this project to ensure affordability, necessary training and awareness creation, continuous stove usage, and financial empowerment of local communities. Upfront carbon funds delivered the necessary start-up capital to cover initial costs for training of artisans and establishing the community-based micro-finance groups. The stove is sold to households at a price that covers material and labour costs. However, for many rural households the sales price is too high. Therefore, carbon revenues are used to provide interest-free loans for stove purchase to ensure that every household is able to buy an efficient cookstove. The records show that over 99% of stoves were purchased through micro-finance groups. After four years of operation, the monitoring shows stove usage rates of 95%, a very high figure achieved thanks to the accompanying activities financed by carbon revenues.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/2497/



KENYA STOVES FOR LIFE: ENERGY EFFICIENT COOKSTOVES PROJECT IN KAKAMEGA



MYCLIMATE, a non-profit foundation based in Switzerland, is one of the world's leading providers of voluntary carbon offsetting measures. myclimate takes care of the project's entire carbon certification process and has successfully issued credits from this project. For the coordination and implementation of this project myclimate works with Eco2librium, a US-Kenyan organization based in Kakamega, Kenya.

PROJECT BENEFITS: The project stove is a fix-installed ceramic wood-burning stove replacing the inefficient three-stone fires in forest communities around Kakamega rainforest, Kenya's last remnant indigenous forest. Local production groups manufacture the ceramic liners using locally available materials such as clay and sand. Thereafter local artisans install one or two liners in the household to create an efficient cookstove. The project has had the following impact to date: installation of over 25,000 cookstoves; annual wood savings of over 50,000 tonnes thereby reducing deforestation of the Kakamega rainforest; working with 10 local production groups and providing income to over 350 persons; over 135,000 people benefiting from clean and efficient cooking; significantly fewer firewood collection trips meaning more time for education or income generating activities; better indoor air quality in households to improve health.

"I'd like to see what we have now continue to be there in the future for the next generation. In the end, not just Eco2, not just the community, it benefits all of us if we protect the forest."

-SYLVIA MWANGI, Project Accountant, Eco2librium

WHY CARBON REVENUES ARE ESSENTIAL: Carbon finance provides the necessary funds for this project to ensure affordability, capacity building for local stove production, training and awareness creation, and continuous usage of efficient stoves. Upfront carbon funds provided the necessary start-up capital to cover initial costs for training of stove production groups and installers. Carbon revenues are used to subsidize the stove's sales price to ensure affordability to all forest-adjacent households and to allow the project to provide fair income for production groups and installers. After four years of operation, the monitoring shows a stove usage rate of 93%, a very high figure achieved thanks to the accompanying measures financed by carbon revenues.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/2497/

contact | KATHRIN DELLANTONIO | INFO@MYCLIMATE.ORG | MYC.ME/KAKAMEGA |



KENYA KENYA CLEAN COOKSTOVES AND WATER PROJECT



THE PARADIGM PROJECT develops distribution networks that serve customers at the base of the economic pyramid. We sell efficient stoves, water filters, solar lights and other socially beneficial products and we sell carbon credits generated from their use to fund growth and keep product pricing low. As a result, we create tremendous social, economic and environmental impact in emerging markets.

PROJECT BENEFITS: Paradigm was built around a simple premise: provide smart, simple products that work as promised, treat people with respect, empower them with choice and expect them to pay for something of real value. And our customers have responded in droves. Paradigm is the first organization to bring a robust consumer products approach to the sector, helping it realize tremendous adoption rates and initial scale. To date we have created some outstanding early impacts, including:

- sold more than 120,000 stoves with up to 300,000 more currently under contract;
- saved families over \$3.7 million in household income from reduced fuel use;
- saved women more than 2.7 million productive hours that otherwise would have been spent collecting fuel;
- saved 324,000 trees from deforestation; and
- avoided more than 250,000 tonnes of CO₂e.

"For me and my family this stove is the best. It saves wood and saves me money. And because I don't have to walk 14 kilometers every 2 days for more wood, it gives me more time with my boys and for me, that's the most important benefit of all...I'm more free..."

-CHUKULISA KARANI, 33 year old single mother of Abdul and Ali, born and raised in Kalacha, Northern Kenya

WHY CARBON REVENUES ARE ESSENTIAL: Carbon revenues enable The Paradigm Project to reach the scale and sales volume necessary to operate a low-profit business model. Reaching remote rural areas with consumer durable goods is extremely expensive. Economies of scale are a must to be sustainable. Carbon revenue covers the gap between start-up and scale, allowing us to retain viable consumer pricing on our products, even while spending heavily to promote products that require significant behavioral change and sacrifice of already scarce financial resources. As projects grow to scale, their revenue can help fund expansion into new countries or offset costs to reach areas of the country that are not commercially sustainable without those revenues because of geography or distance. While carbon revenue serves only as a start-up and growth agent for the business, without carbon revenues, this model would not function correctly.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/1912/



KENYA AND TANZANIA SIMGAS BIOGAS PROGRAMME OF ACTIVITIES



SIMGAS IP BV is an innovative design and production company focused on delivering affordable small-scale biogas and bio-sanitation systems to customers in (sub)tropical regions. We offer households tools to improve their lives and income positions. Our products have been developed in close collaboration with local partners in East Africa, and our systems are locally produced and sold through our Joint Venture with leading East African plastics producer, Silafrica Tanzania. We work closely with our customers to ensure they are well trained and supported by our maintenance teams, ensuring that the SimGas brand is associated with quality and ease of use.

PROJECT BENEFITS: Due to our innovative plastic design, the cost of buying and installing a biogas system is dramatically reduced compared to brick models. This makes biogas an affordable option for both urban and rural households that would otherwise not have been able to afford the technology. A family that operates a six cubic meter biogas system can meet their daily cooking needs with a modern and clean double burner gas-stove, and save money and time (3+ hours a day!) otherwise spent on purchasing or collecting wood fuel. Farmers can also increase their agricultural productivity through the use of bio-slurry as fertilizer (a co-product), and improve household sanitation conditions. Cooking on biogas is quick, practical and clean. Our urban biogas users can dispose of organic household waste and improve sanitation while reducing energy expenses.

"The SimGas biogas installation saves me time and I don't have to worry about charcoal costs. I'm able to cook quickly and it's very clean. We are very happy with this product."

-FATUMA YUSUF, family of six, Dar es Salaam

WHY CARBON REVENUES ARE ESSENTIAL: Income from carbon credits will be directly re-invested into the project. Finance will be used to make the cost of the biogas digesters more affordable and extend the guarantee period, making this technology even more accessible to a wider range of customers.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/2318/



KENYA OSERIAN MAASAI COOKSTOVES



SOUTH POLE GROUP is a globally leading developer of high quality emission reduction projects with headquarters based in Switzerland. south pole group has developed over 200 projects around the world. For this fascinating project in Kenya, south pole group partnered with the local Oserian Flower Farm. Oserian grows Fairtrade certified roses, which are grown naturally, sustainably and responsibly. As many Masaai work on the flower farm, Oserian decided to invest to improve their health, while protecting the climate and the local biodiversity.

PROJECT BENEFITS: This Gold Standard project combines carbon mitigation with sustainable development, reducing the release of harmful emissions, decreasing the demand for firewood by 50%, reducing indoor-smoke inhalation and providing healthcare improvements. Locally produced modern cooking stoves replace open fires, thus reducing demand for non-renewable biomass. This diminishes the amount of CO₂ entering the atmosphere, protects forests and wildlife habitats, reduces respiratory illnesses, and shortens firewood collection time. The latter two points apply mainly to women and children.

"Bringing a positive change to the life of these Masaai communities, while at the same time helping to conserve one of the most beautiful landscapes on earth and protecting our climate, that's what makes us so enthusiastic about this project."

-THOMAS CAMERATA, Director Product Development, South Pole Group

WHY CARBON REVENUES ARE ESSENTIAL: The carbon revenues are used to strongly subsidize the cookstoves for the Masaai communities and to cover the project's ongoing costs for monitoring and verifications. A part of the revenue of the stoves distributed over 2014 is to be used to support local entrepreneurs producing efficient cooking stoves through a micro-finance scheme.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/1966/

28



MADAGASCAR SOLAR AND EFFICIENT STOVES IN MADAGASCAR



MYCLIMATE, a non-profit foundation based in Switzerland, is one of the world's leading providers of voluntary carbon offsetting measures. myclimate takes care of the project's entire carbon certification process and has successfully issued credits from this project. For the coordination and implementation of this project myclimate works with the Swiss-Madagascan Organization ADES – Association pour le Développement de l'Energie Solaire.

PROJECT BENEFITS: The project locally produces 10 types of solar and efficient cookstove models to replace the inefficient cooking devices of domestic, institutional and commercial users. Since solar cooking requires a change in cooking habits, the project has a strong focus on awareness creation and user training to ensure long term usage. A special school programme creates awareness for climate change and solar and efficient cooking technologies among pupils – the next generation in Madagascar. The project has the following impact to date: installation of over 64,000 solar and efficient cookstoves; annual wood savings of over 212,000 tonnes, thereby reducing deforestation in Madagascar; operating seven stove production and distribution centers and directly providing permanent employment to over 150 persons in Madagascar; over 360,000 people benefiting from solar and efficient cooking; awareness creation for solar and efficient cooking at schools through 350 school visits reaching 50,000 pupils and teachers.

"These days, we prefer cooking with the power of the sun as we need less charcoal."

-MARIANNE, Madagascar

WHY CARBON REVENUES ARE ESSENTIAL: Carbon revenues provide the necessary co-finance for this project to locally develop and produce solar and efficient cookstoves and sell them at affordable prices to the people in Madagascar. Carbon finance is also used to finance important accompanying measures such as user training, cooking demonstrations, and school programs that guarantee long term usage and adoption of new cooking technologies. Thanks to carbon revenues the project has expanded its activities considerably since 2008: the existing production centers were modernized and four new workshops were established; seven new stove models were locally developed as a reaction to clients' feedback; and more than 130 additional permanent jobs were created at the ADES centres.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/2497/



MALAWI IMPROVED COOKSTOVES PROGRAMME FOR RURAL MALAWI/MOZAMBIQUE



C-QUEST CAPITAL (CQC) is a carbon finance and private equity business that works to reduce humanity's carbon footprint, while helping poor people improve their lives in affordable, climate-friendly ways. Since its founding in 2008, CQC and its partners have distributed 100,000 improved cookstoves in some of the poorest countries in the world.

PROJECT BENEFITS: The vast majority of the rural population in Malawi, Mozambique, and Tanzania cooks on highly inefficient, traditional three-stone fires, which are often located inside poorly ventilated kitchens. This not only causes severe household air pollution and chronic health problems, it limits economic productivity and leads to some of the highest deforestation rates in the world. CQC has developed an innovative, high-efficiency cookstove to meet the needs of the people in this part of southern Africa. Villagers are trained to build their own mud-brick rocket stoves (TLCRS), with metal parts provided for free by CQC through Total LandCare (TLC), its partner on the ground. Enabling and empowering women in this way creates a sense of ownership and enthusiasm for the TLCRS wherever it is introduced.

"I have learned how to inform and educate customers upon the usage of improved cookstoves and how to approach organisations and companies in Lilongwe to appreciate improved cookstoves."

-MALAWIAN WOMAN, employed as marketing assistant in urban cookstove project

WHY CARBON REVENUES ARE ESSENTIAL: CQC uses carbon revenues for the recovery of capital expenditures and costs associated with securing on-going project financing and with project planning and preparation; to recoup overhead and underwrite implementation, including procurement and distribution of cookstoves and replacement of component parts when necessary; for marketing, training, monitoring, and documentation; to help NGO partners cover salaries of extension workers who are critical to success of projects; and to develop capacity for project replication/expansion.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/1936/



MALAWI GS613-INTEGRATED BIOMASS ENERGY CONSERVATION PROJECT-MALAWI



HESTIAN's improved cookstoves and fuel efficiency projects in Southern Africa directly reduce indoor cooking smoke – one of the leading causes of acute respiratory infections and the top killer of young children worldwide. To date, Hestian's efforts have resulted in over 150,000 homes using improved cookstoves and helped create 2,500 jobs.

PROJECT BENEFITS:

- The Hestian projects provide income to >2,500 women in Malawi and Rwanda.
- The stoves are locally made with only locally-sourced materials.
- The stoves sell for \sim \$2.50 and result in fuel savings of more than 1 tonne of wood per year.
- More than 150,000 households have been reached (>750,000 people) in Malawi.
- >28,000,000 "adult adjusted meals" have been prepared using the project's Fixed Institutional Stoves for more than 160,000 people (including over 140,000 primary school students) at 179 institutions.
- Malawi and Rwanda are currently undergoing rapid expansion and at least 180,000 additional households will be reached in 2015 alone (150,000 households in Malawi and 30,000 in Rwanda).
- Malawi is the the most densely populated country in Southern Africa whose population has tripled since 1966.
- 88% of the Malawi's energy comes from biomass and it has a deforestation rate of 2.8% p.a.

"I like the stove because it saves firewood, it cooks fast and now I don't have teary eyes and frequent coughing. I get paid for each stove of good quality that I make. It is not easy . . . but I have learnt the technique and I have learnt the business."

 $-\ensuremath{\mathsf{MRS}}$. $\ensuremath{\mathsf{MBEWE}}$, producer and user

WHY CARBON REVENUES ARE ESSENTIAL: The project has been running sustainably for more than 8 years on re-invested carbon revenues.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/2522/

contact JOHN O'CONNOR JOHN.OCONNOR@HESTIAN.COM WWW.HESTIAN.COM



NIGERIA DISTRIBUTION OF FUEL-EFFICIENT IMPROVED COOKSTOVES IN NIGERIA



C-QUEST CAPITAL (CQC) is a carbon finance and private equity business that works to reduce humanity's carbon footprint, while helping poor people improve their lives in affordable, climate-friendly ways. Since its founding in 2008, CQC and its partners have distributed 100,000 improved cookstoves in some of the poorest countries in the world.

PROJECT BENEFITS: Despite being a major oil producer, Nigeria has the largest urban population cooking with firewood in the world. Nigeria's refineries are moth-balled, LPG and kerosene are imported, making these fuels expensive and the supply unreliable, even for those who can afford them. There is a huge unserved market for modern, efficient, wood-burning cookstoves, yet very few are available to Nigerian consumers. CQC is importing EcoZoom and EzyStoves for its partner, SOSAI, to sell in Kaduna and Kano, two of Nigeria's most populous states, with plans to expand nationwide. The project is designed to reach over 1.2 million households (over 8 million people) over the next decade. Each stove eliminates 3 to 4 tonnes of CO₂ per year and reduces firewood consumption by about 70% compared to cooking over an open fire. In addition, the partnership with SOSAI creates economic opportunity for women who sell the product.

"With Fast Fire [cookstove] you save money because you only need two pieces of wood. See how clean my house is! The smoke will not go into the house and you will not get sick."

WHY CARBON REVENUES ARE ESSENTIAL: CQC uses carbon revenues for the recovery of capital expenditures and costs associated with securing on-going project financing and with project planning and preparation; to recoup overhead and underwrite implementation, including procurement and distribution of cookstoves and replacement of component parts when necessary; for marketing, training, monitoring, and documentation; to help NGO partners cover salaries of extension workers who are critical to success of projects; and to develop capacity for project replication/expansion.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/1936/



NIGERIAEFFICIENT FUEL WOOD STOVES FOR NIGERIAAND IMPROVED COOKSTOVES FOR NIGERIA PROGRAMME OF ACTIVITIES



ATMOSFAIR is a climate protection organization focusing on travel. We actively protect the climate by offsetting greenhouse gases through offset projects developed and financed in house, particularly clean cookstove technologies.

PROJECT BENEFITS: Our cookstove project in Nigeria is an intervention against household air pollution, deforestation, poverty and greenhouse gas emissions. We significantly enhance the private situation of thousands of households by making available the most efficient and durable cookstove on the market (Save80). The improvement of livelihood resulting from income and time saving and from health improvement will help the poorest to create a perspective for their children, and that in a country which is known for its difficulties, hazards and urgent need of pioneers.

"I can even use the corncob remains and need hardly any wood to cook. When I used to cook, my eyes often watered. That is over."

-ALMAJIR SAFIYANU, stove user

WHY CARBON REVENUES ARE ESSENTIAL: The carbon revenues are used to subsidize the stove prices and make long-lasting, high quality stoves available for many poor families. The stove design has been adopted according to the comments and needs of the users, to make sure we distribute a product that is really wanted and used. The continuous feedback from Project partners and the complete satisfaction of stove users are the key issue to ensure sustainability of a project.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/2014/



RWANDA IMPROVED COOKSTOVES PROGRAMME FOR RWANDA



ATMOSFAIR is a climate protection organization focusing on travel. We actively protect the climate by offsetting greenhouse gases through our own offset projects, particularly clean cookstove technologies.

PROJECT BENEFITS: In Rwanda our cookstoves have a strong impact on enhancing the situation around poverty, deforestation, indoor air pollution and the regional greenhouse gases output. We significantly improve the private situation of thousands of households providing them with the most efficient and long lasting cookstove on the market (save 80 model). In Rwanda we cooperate with the United Nations High Commissioner for Refugees (UNHCR) to also supply cookstoves to refugee camps. The most vulnerable therefore benefit from a clean cooking solution. The stoves also help to ease tensions between the local population and refugees from Congo within Rwanda who compete for the limited wood-reserves of the country. This is a side effect which should not be underestimated in a country like Rwanda. The social business Inyenyeri is also part of the atmosfair programme: www.inyenyeri.org.

"I bought the stove in December last year and I have only used Rwf 8,000 [on fuel]. Before then, I could buy two to three sacks of charcoal a month which would cost about Rwf 28,000 depending on the market prices," a joyful Uwamariya affirmed.

WHY CARBON REVENUES ARE ESSENTIAL: The carbon revenues are used to reduce the price of the Save80 stove for end-users. Furthermore carbon revenues help to bring more stoves to refugees and to communities adjoining the camps.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/2014/


RWANDA TUBEHO NEZA (LIVE WELL)



DELAGUA HEALTH RWANDA is a multidisciplinary organisation focused on improving the health of people and building sustainable communities around the world. Working in a public-private-partnership (PPP) with the Rwandan Ministry of Health and using local Community Health Workers to provide health education and training, the project enables communities to become self-supporting by providing them with the necessary technology and know-how. DelAgua also works with the London School of Hygiene and Tropical Medicine to validate human health impacts of the programme and Portland State University for remote reporting using SweetSense.

PROJECT BENEFITS: The DelAgua are distributing 600,000 advanced water filters and 600,000 high efficiency cookstoves to the poorest 30% of households in Rwanda, about three million people. The project is targeted at providing individual households with a ready supply of clean drinking water and an improved efficient means of cooking.

Benefits accordingly come at scale. The water filters convert microbiologically contaminated water into safe, clean drinking water, reducing water borne diseases. The cookstoves provide a cleaner cooking solution by reducing fuel usage by up to 60% and smoke emissions by up to 70%, thereby reducing climate harming greenhouse gases and helping to reduce diseases caused by air pollution. Improved education, increased productivity and new employment opportunities are all other benefits of the project.

"We're so excited to receive the filter. It's helping our family to reduce diseases. We don't have to collect as much wood and my children will be able to go to school more."

-NYABYENDA MONICA, Gatare village

WHY CARBON REVENUES ARE ESSENTIAL: Carbon revenue is essential for distributions to the poorest people, as it is the primary revenue for the project, and pays for the hardware, and most of the education and outreach costs.

In the retail market, cookstove sales will be facilitated by microfinance, but supply chains and access are difficult for the 90% of the population living in rural areas. Carbon revenues will be used to ensure access in the 'last mile', bringing down the final cost of purchase in remote and rural households.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/1723/



RWANDA AND MALAWI GS1265 – AFRICAN BIOMASS ENERGY CONSERVATION POA



HESTIAN's improved cook stoves and fuel efficiency projects in Southern Africa directly reduce indoor cooking smoke – one of the leading causes of acute respiratory infections and the top killer of young children worldwide. To date, Hestian's efforts have resulted in over 150,000 homes using improved cook stoves and helped create 2,500 jobs.

PROJECT BENEFITS:

- Hestian projects provide income to >2,500 women in Malawi and Rwanda.
- The stoves are locally made with only locally-sourced materials.
- The stoves sell for ~\$3.00 (Rwanda) ~\$2.50 (Malawi) and result in fuel Savings of more than one tonne of wood per year.
- More than 15,000 Households in Rwanda and 150,000 in Malawi (>825, 000 people).
- Malawi and Rwanda are currently undergoing rapid expansion and at least 180,000 additional households will be reached in 2015 alone (150,000 households in Malawi and 30,000 in Rwanda).
- 85% of Rwanda's energy comes from biomass. Rwanda's demand for energy was reported to be growing rapidly by 25% p.a. Rwanda's total forest cover dropped from 698,660 hectares in 1990 to 545,000 hectares in 2005.
- Malawi is the most densely populated country in Southern Africa whose population has tripled since 1966. 88% of the Malawi's energy comes from biomass and it has a deforestation rate of 2.8% p.a.

"This stove, the 'canarumwe' is so much better than the last one I had, the mud stove. It's simple: this one uses less firewood and retains heat."

-ODETTE MUHAWENIMANA AND HER CHILD, from Kabuga Village in Rutsiro District in Rwanda

WHY CARBON REVENUES ARE ESSENTIAL: Hestian projects have been running sustainably for more than 8 years on re-invested carbon revenues. The GS1265 VPAs in Rwanda and Malawi were set-up maintained using re-invested carbon revenues from GS613.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/2522/



SUDAN DARFUR LOW-SMOKE STOVES PROJECT



<image>

STOVES DISTRIBUTED TO-DATE: 7,500

CARBON CLEAR, a UK-based global carbon management company, is helping corporates reduce emissions and offset their carbon footprint. Carbon Clear works in partnership with NGO Practical Action to deliver the project. Practical Action works to alleviate poverty and injustice through the use of technology in low cost, appropriate, small-scale development solutions to help people to help themselves.

PROJECT BENEFITS: The main objectives of the project are:

- Reduce greenhouse gas (GHG) emissions. Each stove distributed avoids about 4.6 tCO₂e/y and reduces twice the amount of GHG emissions compared to more efficient biomass stoves.
- Improve household health by replacing traditional cooking methods with low carbon, low smoke liquefied petroleum gas (LPG) stoves. Burning biomass releases large amounts of particulates, carbon monoxide and other pollutants and prolonged exposure to smoke contributes to acute respiratory infections and other ailments in children.
- Slow the rate of deforestation by replacing biomass with LPG. For every 10 trees cut down in Sudan, only two are regrown.
- Empower women and reduce gender inequality by training women entrepreneurs to deliver the stoves through microfinance schemes. Using LPG also reduces the time women spend cooking and collecting fuel.
- Alleviate poverty by enabling energy savings.
- The project received the UNFCCC's 2013 Momentum for Change award for its contribution to delivering climate friendly finance.

"Cooking with wood meant that the whole house was full of smoke. It's a house made of hay and inside it is completely black. I have serious eye problems as a result of the smoke – I was going blind because of the smoke. I think the LPG stove has saved my sight."

-RANDA FAUDUL ALI, project beneficiary living in the village of Kafute

WHY CARBON REVENUES ARE ESSENTIAL: The project is fully financed by the sales of VER's and the revenue of the sale of carbon credits are absolutely crucial for the long term sustainability of the project. Purchasing carbon credits from the Darfur Low Smoke Stove Project allows the micro-fund for the stoves to expand, enabling low-interest rate micro-loans for more households. Repayment rates for the microfinance scheme are in excess of 90%, allowing the continued delivery of stoves to households in Darfur. Carbon revenues also contribute directly to the monitoring costs and salary of the 10 project employees. This is a community scale project which results in direct benefits to households in El Fasher.

PROJECT DEVELOPER PROFILE:

http://www.carbon-clear.com/buy-carbon-credits/carbon-offsets-our-projects/darfur-low-smoke-stoves-project/

contact OLIVIER LEVALLOIS OLEVALLOIS@CARBON-CLEAR.COM WWW.CARBON-CLEAR.COM



TANZANIADISSEMINATION OF FUEL EFFICIENTBIOMASS STOVES AND WATER PURIFICATION SYSTEMS IN TANZANIA



 YEAR
 2015 & 2016
 2017

 ESTIMATED CREDITS
 185,000 tCO2
 40,000 tCO2

STOVES DISTRIBUTED TO-DATE: 40,000



ENVIROFIT is a social enterprise that designs, produces, and sells efficient, durable and affordable cookstoves that create environmental, health, and social impacts for homes and institutions in developing nations. Envirofit uses carbon finance to subsidize the cost of cookstoves to consumers. Envirofit has sold more than 850,000 stoves, impacting more than 4.2 million lives across 45 countries.

PROJECT BENEFITS: The goal of the project is to enable the large-scale distribution of high efficiency biomass cookstoves in Tanzania. Cookstove sales create jobs and influence regional markets and local entrepreneurs. Envirofit creates opportunities for new and existing local businesses to boost the economy on a regional level and create a sustainable channel of distribution. The carbon finance serves to partially subsidize the cost of cookstoves to allow for market-based pricing making the cookstoves more affordable for families. Envirofit fosters local entrepreneurs to establish new businesses selling, monitoring and evaluating the impact of the stoves. The project will have multiple benefits of reducing global greenhouse gas emissions, reducing pressure on forests and woody biomass resources, reducing indoor air pollution associated with use of traditional stoves and freeing up income that can be used for other purposes by reducing the expenditures of households, communities and/or small businesses on fuel for cooking.

"I love my Envirofit stove. Before I bought my new stove, every three days I had to walk to the forest 13 kilometers away to get more wood and I've done this since I was a young girl... now, with the Envirofit I make this journey once a month...it's made my life better because I no longer have to work so hard to cook and to heat water for my family."

WHY CARBON REVENUES ARE ESSENTIAL: Envirofit adopts an innovative approach to carbon finance that enables the end user of its efficient stove technologies to take advantage of carbon finance in advance of it being accrued. We invest our own capital and arrange high impact development loans to subsidize the market price of the stove at the point of sale. This means that customers buy the stove at a heavily reduced rate, often below the cost price. The loan attributable to each stove sale is paid back via the sale of carbon credits that are generated by the stoves over their lifetime. The stove customer waives their rights to this carbon revenue in return for receiving the stoves at the subsidized price, but agrees to participate in the project monitoring plan. Envirofit therefore takes on the risks associated with carbon finance, but passes the benefit risk-free on to the stove user at the point of sale.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/2060/

38

contact NICK MARSHALL NICK.MARSHALL@ENVIROFIT.ORG WWW.ENVIROFIT.ORG



UGANDA IMPROVED COOKSTOVES FOR SOCIAL AND ENVIROINMENTAL IMPACT IN UGANDA



STOVES DISTRIBUTED TO-DATE: 490,000+



IMPACT CARBON is a pioneering non-profit project developer with roots in public health and entrepreneurship. Impact Carbon manages a portfolio of projects with the common goal to have measurable impacts on health, economy and environment in the space of clean energy and safe water.

PROJECT BENEFITS:

- 490,000+ efficient stoves have been sold to Ugandan households and schools.
- More than two million people benefiting from lower energy costs and reduced indoor smoke.
- 600+ retailers across Uganda increase their income by selling stoves in local markets
- 70 local Ugandan artisans are employed making the stoves.
- 500,000+ tonnes of carbon emissions are avoided by the project each year.
- The use of 100,000+ tonnes of charcoal is avoided each year, lowering pressure of Uganda's forests.
- More than \$100+ saved per household per year, savings which can be spent on school fees, uniforms and medical care.
- Reduced exposure to carbon monoxide and other toxic chemicals inside households.

"The stove is so great that if I had the money, I would buy them for all my friends! It saves me 1000 Shillings per day on charcoal compared to my other stove." -FLORENCE KIBUUKA OF MAKINDYE KAMPALA. stove user

WHY CARBON REVENUES ARE ESSENTIAL: Carbon revenues are used to support our local cookstove manufacturing partners to grow their businesses. This is done by providing capital investments for time-saving tooling and machinery which allow them to streamline production and increase the efficiency of their improved stoves. These investments are coupled with best-practice guidelines and hands-on technical assistance, which ensure they can meet demand without compromising quality or efficiency. On the demand side, we create manufacturer-specific marketing collaterals (mini-bill-boards, flyers, stove stickers, truck banners etc.) to help drive sales and increase product visibility for our partners. A national radio campaign emphasizing the unique benefits of improved stoves to consumers is being launched in 2015 to further drive demand and sector growth. Carbon revenue allows us to carry out these activities to create a thriving improved cookstove sector in Uganda.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/1946/

contact JUSTIN WHALEN JWHALEN@IMPACTCARBON.ORG WWW.IMPACTCARBON.ORG



UGANDA IMPROVED COOKSTOVES FOR EAST AFRICA (ICEA)



INTERNATIONAL LIFELINE FUND (ILF) is a 501(c)(3) non-profit organization, has been working in Lira, Uganda since 2006. ILF's stove program consists of the production and distribution of charcoal saving stoves, locally called the "Okelo Kuc", meaning "Peace Bringer". ILF's stoves are locally produced at its production facility in Lira. Since 2006, ILF has produced and distributed over 67,000 Okelo Kuc stoves in northern and eastern Uganda. ILF has established itself as the largest improved cookstove producer and distributer in Northern Uganda, and the second largest in Uganda. ILF works with local entrepreneurs to sell its stoves in local markets.

PROJECT BENEFITS: The Okelo Kuc stove is marketed to families who would typically cook with traditional charcoal stoves. Over 67,000 Ugandan families have made the switch to improved cookstoves because of ILF's work. The Okelo Kuc is locally made in Lira, with locally available materials. Its thermal efficiency is 35% and it reduces charcoal use by 45% over traditional cookstoves, saving trees and improving livelihoods. The Okelo Kuc's combustion chamber is made of a mixture of organic material including clay, risk husk and mica. All components are made for durability and longevity and all parts are replaceable. Okelo Kuc reduces household smoke, improving the health of the end users. Okelo Kuc production creates jobs in Northern Uganda and is sold by a network of mostly women vendors who are able to generate incomes to meet household needs. ILF conducts community awareness trainings and sensitizations to expand the market for clean cookstoves.

"The trainings given to us by ILF have changed me...I am able to take stock of and manage my business... this is great because the profits help me run my family."

-ESTHER ETWOP, Okelo Kuc Stove Vendor in Lira town, since 2009

WHY CARBON REVENUES ARE ESSENTIAL: ILF provides each customer a maintenance guarantee on its stove for up to seven years, so that every customer benefits from the carbon reductions being generated by the stove they purchase. ILF currently subsidizes the price of its stoves so that they can be easily accessible to impoverished families. The revenues generated from the sale of carbon credits will help offset the subsidies currently being provided by ILF in order to increase marketing efforts and scale production and distribution of improved cookstoves. Additional net revenues realized from the sale of carbon credits will be reinvested to benefit the communities where people buy the stoves. ILF currently provides clean water sources to communities in northern Uganda, requiring only a symbolic co-payment from the community, and has served over 250 communities to date. Carbon credit sales will also be used to support this effort.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/2059/

contact VAHID JAHANGIRI VJ@LIFELINEFUND.ORG WWW.LIFELINEFUND.ORG



UGANDA UPENERGY'S IMPROVED COOKSTOVES CARBON PROJECT IN UGANDA



UPENERGY distributes high quality, affordable clean energy products such as improved cookstoves in the developing world. Sales are supported with logistics capability, marketing, inventory financing and after-sales service. UpEnergy was named among Fast Company's 2014 Top 10 Most Innovative Companies in Africa.

PROJECT BENEFITS: UpEnergy's stoves replace primarily three-stone fires. Since its founding, UpEnergy has served over 125,000 Ugandans. The environmental impact is considerable, with 30,000 tonnes of CO₂ emissions avoided and over 120,000 trees saved thus far. The households we serve save several hours per day through reduced time needed for cooking and fuel collection, and those who purchase fuel save \$72 per year.

Perhaps the most compelling impact on the individual level comes from the income generating opportunities we offer our retailers and sales agents. For example, Aaron Okello is a motorcycle taxi driver turned stove salesman whose life was completely transformed due to income from working with UpEnergy. Aaron was able to relocate his wife and three children from northern Uganda to the city, rent suitable housing for the entire family, and pay school fees for all of his children, an important step towards recognition and respect in his culture. Another example, Richard, who was previously a market vendor in East Africa's largest open air market, has seen his life change not only from a financial perspective:

"I am so happy since now I am like a teacher in my community. I help people by providing them with stoves that save firewood and by teaching them about their benefits."

-RICHARD, UpEnergy Salesman

WHY CARBON REVENUES ARE ESSENTIAL: Carbon revenues support the cost of marketing and distribution needed to serve remote and rural communities in which improved cooking technology awareness is extremely low prior to UpEnergy's work. They also support after sales service and a robust warranty programme that ensures reliable and continued use of the technology.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/2014/



ZAMBIA IMPROVED COOKSTOVES PROGRAMME FOR RURAL ZAMBIA



C-QUEST CAPITAL (CQC) is a carbon finance and private equity business that works to reduce humanity's carbon footprint, while helping poor people improve their lives in affordable, climate-friendly ways. Since its founding in 2008, CQC and its partners have distributed 100,000 improved cookstoves in some of the poorest countries in the world.

PROJECT BENEFITS: Sixty percent of Zambia's 13.5 million people live in rural areas, where they use firewood to cook on traditional open fires. Making an improved cookstove (ICS) available to a poor family in rural Zambia means less time needs to be spent gathering fuel, reducing the risks women and children incur being away from the village. It means lower exposure to biomass smoke, which is especially harmful to women and children. To the global community, it means several tonnes less of CO₂ per ICS in use per year and about as much again in CO₂ equivalent in the form of short-lived climate pollutants and other greenhouse gases. Part of a comprehensive programme of support for sustainable development at the village level, the cookstoves programme helps alleviate poverty and food insecurity and improve water and air quality, while placing the supply of firewood and timber on a more sustainable footing.

"This is how much wood I used in one day when I was cooking on an open fire. Now that I have a cookstove, it lasts me for a week." –WOMAN IN ZAMBIAN VILLAGE

WHY CARBON REVENUES ARE ESSENTIAL: CQC uses carbon revenues for the recovery of capital expenditures and costs associated with securing on-going project financing and with project planning and preparation; to recoup overhead and underwrite implementation, including procurement and distribution of cookstoves and replacement of component parts when necessary; for marketing, training, monitoring, and documentation; to help NGO partners cover salaries of extension workers who are critical to success of projects; and to develop capacity for project replication/ expansion.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/1936/

42





CAMBODIA NEW LAO STOVE



STOVES DISTRIBUTED TO-DATE: 2,955,481



GERES is a non-profit organization with headquarters in France and which has been in Cambodia for the past 20 years. Working towards promoting sustainable biomass energy access among the Cambodian population, GERES heavily invests on research and technology design and testing, and works with government, local communities and the private sector on helping create a sustainable biomass fuel value chain.

PROJECT BENEFITS: The New Lao Stove (NLS) project aimed to make available via the traditional supply chain an improved cookstove, to help manage woodfuel demand among both urban and rural population. Compared with different types of traditional stove, the NLS has been tested to require 7.8% to 33% less wood, or 4.4% less charcoal, to cook the same amount and type of food.

By December 2014, more than 800,000 Cambodians have accessed the New Lao Stove through the commercial activities of the Improved Cookstove Producers and Distributors Association of Cambodia (ICoProDAC), which through its network of 113 producers, 203 distributors, and retailers, spread over 2.9 million NLS across Cambodia. Key benefits:

- Savings of at least \$4.00/month on household fuel expenses.
- Contributed \$11.3 million to the local economy and generated and increased income-earning opportunities for 750 people, including many women.
- Helped preserve forests and climate by saving 1.6 billion tonnes of wood, and avoiding emission of 2.4 million tCO₂.

"I started using the New Lao Stove in 2008. My wood consumption and expenses had been halved. Cooking is faster and dishes taste better because smoke is controlled."

-OUK CHAN, 52 years old, New Lao Stove user

WHY CARBON REVENUES ARE ESSENTIAL: Remaining carbon revenues will be used to institutionalize mechanisms – envisaged to be primarily driven by the Improved Cookstove Producers and Distributors Association of Cambodia (ICoProDAC) – that will ensure survival, growth and quality of the supply chain.

Waiting to be implemented, the steps identified to ensure sustainability of the New Lao Stove value chain are:

- Creation of the ICoProDAC Credit Union to facilitate access to affordable finance among members.
- Development of new business and self-financing mechanisms to increase both the ICoProDAC's incomes and added value to its members.
- Operationalization of a simplified quality control and monitoring system to ensure consistency of New Lao Stove quality.
- Strengthening of ICoProDAC's governance, branding image and fundraising capacity in order for it to become a relevant player in the cookstove sector representing the entire improved cookstove supply chain, and serving as paradigm for other associations, locally and regionally.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/2257/

contact CHARLOTTE NIVOLLET C.NIVOLLET@GERES.EU WWW.GERES.EU



CHINA SICHUAN RURAL POOR-HOUSEHOLD BIOGAS DEVELOPMENT PROGRAMME





GERMAN UPM GMBH, along with its partner **CHENGDU OASIS**, is a leading developer of ambitious climate protection projects with a large and diversified portfolio of high-quality carbon credits. We develop, implement, and manage innovative GHG emission reduction projects for our clients with mandatory or voluntary reduction obligations.

PROJECT BENEFITS: The programme aims to support biogas digester installation at up to one million remote and low-income households in Sichuan. Those rural households are raising pigs and storing the manure in open pits and using coal (among other fuels) for cooking. The installation of a household biodigester reduces greenhouse gas emissions, and it helps to improve rural living conditions in many different ways. It reduces household air pollution by providing a clean cooking fuel. As the biodigester is directly connected to the animal barns and the house toilets, it is providing households with access to improved sanitation, reducing the risk of diseases and infections, reducing bad odours and the number of flies in the house. After the biogas generation process, the fertiliser quality of the effluent is greatly improved compared to the natural animal manure. The programme also has large economic benefits, supporting household savings on fuel purchases.

"The main reason for building a digester is saving money. But it has also additional benefits: our home is now free of smoke, flies and smells."

-HUANG MINGYING, Sichuan Farmer

WHY CARBON REVENUES ARE ESSENTIAL: The Carbon Revenues generated are used mainly to overcome the existing barriers faced by households in investing and operating the digesters, while supporting long-term economic viability of the programme. The lion's share of the additional revenue is directly forwarded to the households to provide an additional incentive for the construction of a digester, when, despite the national subsidy, qualifying poor households still have difficulties raising the initial investment needed. A minor, yet still significant revenue portion, finances a dense network of technical service stations, including the hiring and training of the technical staff. The technical network is offering free technical maintenance service to participating households and supporting them with the extraction of already-digested material to be used on local fields as fertiliser. The remaining revenue share is used to manage the programme, organise the necessary data collection and to finance third-party validations and verifications to ensure total programme transparency.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/2367/

contact MARTIN DILGER MDILGER@UPM-CDM.EU WWW.HOUSEHOLD-BIOGAS.COM, WWW.UPM-CDM.EU



CHINA IMPROVED HEATING AND COOKING PROJECT IN CHINA



NUMBER OF ISSUED CREDITS CURRENTLY AVAILABLE FOR SALE: 380,000 tCO₂

 ESTIMATED FUTURE ISSUANCES FOR SALE

 YEAR
 2015 & 2016
 2017

 ESTIMATED CREDITS
 1,200,000 tCO2
 500,000 tCO2

STOVES DISTRIBUTED TO-DATE: 128,000+



IMPACT CARBON, is a pioneering non-profit project developer with roots in public health and entrepreneurship. Impact Carbon manages a portfolio of projects with the common goal to have measurable impacts on health, economy and environment in the space of clean energy and safe water.

PROJECT BENEFITS:

- 128,000+ stoves have been sold in three provinces.
- Efficient stove entrepreneurs are supported in growing their business.
- The use of 450,000+ tonnes of coal has been avoided since the project's start.
- 500,000+ tonnes of CO_2 emissions are avoided every year.
- Households save \$1,500 \$2,000 on fuel over the stove's five year lifetime.
- Households save \$37 \$50 for every dollar spent on the stove.
- Funds saved can be used for food or medical bills.
- Improved cookstove users surveyed reported fewer symptoms indicative of exposure to indoor air pollution, including coughing and eye irritation.

"The stove is so fast and easy to use, much better than the long wait time from our old coal stove. I've saved so much money from not having to buy coal for cooking."

-LIU ZHIHONG, Xiaohu Village, Shanxi Province

WHY CARBON REVENUES ARE ESSENTIAL: As an experienced carbon project developer, Impact Carbon is able to leverage carbon finance to support this programme and offer stoves at a price that is affordable to rural households. As a non-profit, revenue from carbon finance can be directly reinvested into the program, scaling up dissemination of improved stoves and creating a programme model that is sustainable long term.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/2147/



CHINA LONGJIE WOOD SAVING STOVES PROJECT



Since 1994 **INITIATIVE DÉVELOPPEMENT (ID)** has assisted disadvantaged communities in developing countries, by actively supporting them through local organisations (associations, companies, town halls), aiming at long-term provision of basic needs including health, water and sanitation, education, agriculture, and access to energy.

PROJECT BENEFITS: The project specifically targets remote and poorer parts of the country whose populations are predominantly ethnic minorities. These regions are often ignored by government projects. Unlike many projects in China, ID works directly with beneficiaries in the field, ensuring a thorough approach to quality stove construction. The technology – masonry stoves with a cast iron combustion chamber – caters to local needs, and local technicians carry out construction. The wood-saving stoves are used for cooking large quantities of food, in particular for animals. Their use enables families to reduce wood consumption by up to 50% for cooking. Therefore the project benefits both the local economy – by creating local technical jobs and saving time spent on wood collecting chores – and helps the environment by counteracting deforestation.

"Every day I had to walk six kilometres to collect the 30 kilograms of wood my family needed for one day. Today, this chore has been much reduced!"

-ZHU ZHENGHUA, China

WHY CARBON REVENUES ARE ESSENTIAL: The carbon revenues ensure the sustainability of the cookstoves built in Longjie. Indeed, the cookstoves may face several challenges that prevent them from operating optimally (i.e. users not cleaning the stove often enough). In addition, construction failures that require immediate repair may occur, such as the masonry problems. Carbon revenues are expected to cover the costs generated by regular trainings to improve stove usage, carrying out of repairs, technician salaries and part of the materials.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/1713/



CHINA MENGYIN SOLAR COOKER PROJECT



SHANDONG GENKEE TRADE GROUP CO., LTD., a Chinese enterprise, is operating the CDM project "Mengyin Solar Cooker Project" to encourage local poor rural residents to utilize renewable solar power for cooking and water boiling.

PROJECT BENEFITS:

- A total of 49,400 free solar cookers have been distributed to local low-income families.
- Providing rural residents with a clean, practical and convenient way to meet the energy demands of their daily cooking.
- Improving the indoor hygiene of rural residents and protecting the health of women and children against respiratory diseases, whose scope of activities is indoors.
- Contributing to poverty alleviation by reducing fuel costs.
- Job creation and economic diversification.

"The project helped me cook cleanly and conveniently and also reduce fuel costs."

-MS. GAO YANPING, China

WHY CARBON REVENUES ARE ESSENTIAL: The Project was self-financed by Shandong Genkee Trade Group Co., Ltd. The revenue from carbon credits will be used to recover the investment and pay the operating costs, including the salaries for maintenance personnel and parts costs for the solar cookers. The project serves as a model for future projects and stimulates the interest of investors in solar energy projects. It promotes the use of clean energy, educates and trains the rural population on solar energy technology, and builds awareness in environmental protection among the rural population.



CHINA MAMIZE FIREWOOD-SAVING COOKSTOVES PROJECT



SOUTH POLE GROUP is committed to fight climate change. We help companies to reach their sustainability targets through innovative products and solutions as well as premium emission reduction projects. Our team works around the clock and around the globe to improve the state of the climate with market-based solutions such as high-quality emission-reduction projects that also target sustainable development.

PROJECT BENEFITS: One of the primary barriers for new nature reserves in areas like Sichuan Province is the relationship with the local people, where the goals of protecting natural habitat and the wellbeing of the locals can often be at odds. A project like this that improves the livelihoods of local people in a way that supports the nature reserve is a much preferable option to policing and law enforcement. The stoves reduce air pollution and time spent to collect and cut firewood from two to three months down to one month.

"It saves a lot of work for me."

-QELUO NVXI, a local villager who has one of the new stoves.

"The relationship between the local people and us is getting better. It is very helpful for our conservation work."

-ZHANG MIANYUE, Mamize Nature Reserve Officer

WHY CARBON REVENUES ARE ESSENTIAL: Carbon revenues are used to subsidize the cookstoves and to cover ongoing maintenance and monitoring, thus enabling the preservation of the Giant Panda habitat, improving the living conditions of Chinese villagers and serving as bridge to build understanding between the local nature reserve and the local villagers.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/11/



CHINA HUINING SOLAR COOKER PROJECT



TIANJIN HAONENGHUIYUAN TECHNOLOGY CO., LTD., a Chinese enterprise, is operating the CDM project "Huining Solar Cooker Project" to encourage local poor rural residents to utilize renewable solar power for cooking and water boiling. The project was registered in 2012. A total of 49,400 free solar cookers have been distributed to local low-income families.

PROJECT BENEFITS: Providing rural residents with a clean, practical and convenient way to meet the energy demands of their daily cooking; Improving the indoor hygiene of rural residents and protecting the health of women and children against respiratory diseases whose scope of activities is indoors; Contributing to poverty alleviation by reducing fuel costs; Job creation and economic diversification.

"The project helped to reduce my fuel costs and I also got a job in the solar cooker repair station."

-MR. LIU JIANGUO, China

WHY CARBON REVENUES ARE ESSENTIAL: The Project was self-financed by Tianjin Haonenghuiyuan Technology Co., Ltd. The revenue from carbon credits will be used to recover the investment and pay the operation costs including the salaries for maintenance personnel and parts costs for solar cookers in operation. The project serves as a model for future projects and stimulates the interest of investors in solar energy projects. It promotes the use of clean energy, educates and trains the rural population on solar energy technology, and builds awareness in environmental protection among the rural population.



CHINA HUZHU TU AUTONOMOUS COUNTY SOLAR COOKER PROJECT





YUNNAN HAONENG TECHNOLOGY CO., LTD., a Chinese enterprise, is operating the CDM project "Huzhu Tu Autonomous County Solar Cooker Project" to encourage local poor rural residents to utilize renewable solar power for cooking and water boiling. The project was registered in 2012. A total of 49,400 free solar cookers have been distributed to local low-income families.

PROJECT BENEFITS: The project provides rural residents with a clean, practical and convenient way to meet the energy demands of their daily cooking and water boiling and mitigates household air pollution (HAP) through the replacement of coal by solar energy. This will potentially realise long term positive effects on the population's heath and national health budgets. The project also contributes to poverty alleviation by reducing fuel costs. The project requires a lot of basic monitoring and labor for the repair station. Hence, the project creates a large number of jobs for local residents.

"The project helped us get a clean and reliable energy supply for our daily cooking and helped women and children to avoid indoor air pollution"

-MR. JIA ERIUN, China

WHY CARBON REVENUES ARE ESSENTIAL: The project was self-financed by Yunnan Haoneng Technology Co., Ltd and was incentivized by the clean development mechanism (CDM). The project did not generate any revenue without CDM after its implementation. According to the project design, the revenue from carbon credits will be used to recover the initial investment and pay the operating costs including the salaries for maintenance personnel and parts costs for the solar cookers.



INDIA POA FOR THE DISSEMINATION OF "TOP LIT UP DRAFT" (TLUD) IMPROVED COOKSTOVES IN INDIA



ATMOSFAIR is a climate protection organization focusing on travel. We actively protect the climate by offsetting greenhouse gases through our own offset projects, particularly clean cookstove technologies.

PROJECT BENEFITS: Apart from the common benefits of efficient cookstoves (cleaner indoor air, saving on expenses for fuel, fighting deforestation etc.), the "Top Lid Up Draft" (TLUD) micro gasifier stove generates remarkable extra benefits for its users. Cooking on a wood gas flame is practically as comfortable as cooking on liquefied petroleum gas (LPG). Moreover, TLUD users can sell the charcoal generated during pyrolysis back to the project, for further use in restaurants and by other users of conventional charcoal. This provides significant income to the users and saves large amounts of CO_2 by replacing conventional charcoal that is produced in an inefficient way from fuel wood.

"This stove is really very good. This is smokeless, saves wood and gives us income as well. Earlier when we use to cook on our mud stove we required more than double the wood we need now. Your charcoal buyback scheme is very nice. We get extra money every month. In fact this way the stove will become free in a few months' time."

-MUKUL MONDAL, Stove user

USE OF CARBON REVENUES: Carbon revenues are used to recover upfront funding provided by atmosfair to the project for subsidising the TLUD stoves. This project generates additional money from the charcoal, which is a by-product of the usage from the TLUD improved cookstove. This revenue flows directly back to the users.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/2014/



INDIA THE BREATHING SPACE IMPROVED COOKSTOVES PROGRAMME OF ACTIVITIES



ENVIROFIT is a social enterprise designing, producing, and selling efficient, durable and affordable cookstoves that create environmental, health, and social impacts for homes and institutions in developing nations. Envirofit uses carbon finance to subsidizes the cost of cookstoves to consumers. Envirofit has sold more than 700,000 stoves, impacting more than 3.5 million lives across 45 countries.

PROJECT BENEFITS: The goal of the Programme of Activities (PoA) is to enable the large-scale distribution of high efficiency biomass cookstoves in India. Cookstove sales create jobs and influence regional markets and local entrepreneurs. Envirofit creates opportunities for new and existing local businesses to boost the economy on a regional level and create a sustainable channel of distribution. The carbon finance serves to partially subsidize the cost of cookstoves to allow for market-based pricing making the cookstoves more affordable for families. Envirofit fosters local entrepreneurs to establish new businesses selling, monitoring and evaluating the impact of the stoves. The PoA will have multiple benefits of reducing global greenhouse emissions, reducing pressure on forests and woody biomass resources, reducing indoor air pollution associated with use of traditional stoves and freeing up income that can be used for other purposes by reducing the expenditures of households, communities and/or small businesses on fuel for cooking.

"I used to wander and wander in search of firewood when I was using traditional stove. My neighbor introduced me to Envirofit Jivan Jyoti Stove which is a boon. The percentage of fuel consumed by me is reduced by almost 60%, which obviously saves time & money and we are able to live better life."

WHY CARBON REVENUES ARE ESSENTIAL: Envirofit adopts an innovative approach to carbon finance that enables the end user of its efficient stove technologies to take advantage of carbon finance in advance of it being accrued. We invest our own capital and arrange high impact development loans to subsidize the market price of the stove at the point of sale. This means that customers buy the stove at a heavily reduced rate, often below the cost price. The loan attributable to each stove sale is paid back via the sale of carbon credits that are generated by the stoves over their lifetime. The stove customer waives their rights to this carbon revenue in return for receiving the stoves at the subsidized price, but agrees to participate in the project monitoring plan. Envirofit therefore takes on the risks associated with carbon finance, but passes the benefit risk-free on to the stove user at the point of sale.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/2060/

contact NICK MARSHALL NICK.MARSHALL@ENVIROFIT.ORG WWW.ENVIROFIT.ORG



INDIA BIOGAS INSTALLATIONS IN INDIA



FAIRCLIMATEFUND (FCF) is a Dutch social enterprise that pre-finances carbon projects for and with local communities and brings the carbon credits to the market. We have partnered with Bagepalli Coolie Sangha (BCS) since early 2009 to provide upfront financing to enable the production of 12,000 biogas installations. The partnership is long term with the aim of monitoring and maintaining the installations until the units are paid off and additional carbon income can be generated at a household level.

PROJECT BENEFITS: The purpose of this biogas project is to build 12,000, two m3 biogas digesters in the Chickballapur District with members of the Coolie Sangha, a cooperative of poor farmers. As a result, biogas will replace kerosene and wood for cooking and water heating. Now that the participating households convert the organic waste that was soiling the streets into a sustainable and healthier alternative to their wood and kerosene fueled stoves, searching for firewood has become superfluous, time is saved, and money used for kerosene and doctor visits can be used for alternative purposes. Indoor smoke and emissions are completely eliminated which results in less respiratory problems and premature deaths. Houses are cleaner and the remaining slurry from the biogas units is a powerful fertiliser. To ensure proper and continued use more than 200 local women have been trained service and maintain the units earning them additional income.

"Before I had biogas it would take me up to two to three hours to cook every day. To collect firewood I would leave around 8am and return around noon. Now I have time to work."

-NARSAMMA

"I used manure as fertilizer for land application, but now I use slurry and my crops grow faster." –BALLARADDY & NARSAMMA

WHY CARBON REVENUES ARE ESSENTIAL: FairClimateFund (FCF) finances the complete construction, maintenance, and monitoring of 12,000 biogas units. Every year the biogas units produce carbon credits which are delivered to FCF, paying off the investment over a period of nine years. Once FCF is paid back in carbon credits, individual families can sell the carbon credits through BCS on the open market and earn income for an additional 12 years.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/1692/



INDIA THE CHULIKA IN SOUTH INDIA



FAIRCLIMATEFUND (FCF) is a Dutch social enterprise that pre-finances carbon projects for and with local communities and brings the carbon credits to the market. Since 2012 we have provided upfront financing to JSMBT to produce and disseminate 42,000 locally produced stoves, the Chulika. FCF and JSMBT aim to reach households that cannot afford clean cookstoves and are dependent on gathering firewood. The partnership is long term with the aim of monitoring and maintaining the stove usage.

PROJECT BENEFITS: This project replaces inefficient traditional cookstoves in 21,500 households with the efficient fuel wood single pan "Chulika" cookstove in Raichur, a biomass deficient district in Karnataka, India. In the area households generally cannot afford clean cookstoves and are dependent on gathering firewood. The Chulika saves fuel wood by 67.5% and has a thermal efficiency of 30.8%. By reducing fuel wood consumption, the project reduces greenhouse gas emissions stemming from the use of non-renewable biomass. Less time is needed for gathering wood and cooking, which provides additional time for other activities that generate income. This project also leads to a reduction of indoor smoke which results in less respiratory problems and premature deaths in the villages. For women who spend long hours travelling long distances to collect fuel wood this project reduces drudgery.

"We have three acres of irrigated land on which we are dependent. We got the Chulikas from JSMBT and we use it every day. We can save a lot of trees by using the Chulika. Compared to traditional stoves, we can use 40% less firewood. And there is less smoke and our eyes do not burn. It is easy to cook on Chulika."

-MUNIRABEGHUM, The Pandyan village

WHY CARBON REVENUES ARE ESSENTIAL: FairClimateFund (FCF) finances the complete production, dissemination, maintenance, and monitoring of the Chulikas. Every year the improved cookstoves produce carbon credits which are delivered to FCF, and after five years the investment is paid off. Once FCF is paid back in carbon credits, individual families can sell the carbon credits on the open market and earn income directly for an additional five years. Additionally, carbon revenues will be shared during the five year period with JSMBT, the families, and the community, depending on market conditions.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/1692/

contact MAARTEN DERKSEN DERKSEN@FAIRCLIMATEFUND.NL WWW.FAIRCLIMATEFUND.NL



INDIAENERGY-EFFICIENT BIOMASS COOKSTOVESAND BIOMASS FUEL PELLETS FOR COMMUNAL KITCHENS IN INDIA



MYCLIMATE, a non-profit foundation based in Switzerland, is one of the world's leading providers of voluntary carbon offsetting measures. myclimate takes care of the project's entire carbon certification process and has successfully issued credits from this project. Nishant Bioenergy is the project implementer and responsible for the project coordination and the stove production.

PROJECT BENEFITS: The climate-friendly biomass-pellet cookstoves replace liquefied petroleum gas (LPG) cookstoves in small and medium size institutional kitchens in India. In addition, the project entails the build-up of a fuel pellet supply chain as lack of access to biomass pellets was previously the main obstacle to switching to the technology of clean biomass cookers. The project will create around 400-500 jobs. This includes approximately 20 technical jobs in pellet production, 18 low skilled jobs in stove manufacturing and approximately 100 part time jobs in biomass collection. These part time jobs will have strong contribution to farmers' income.

"I have been working with Nishant for four years now. I'm happy to work eight hours a day (six days a week), get paid overtime and double salary on Sundays. I received trainings and now train new employees." –SUCHA SINGH, Welder, Chandigarh

WHY CARBON REVENUES ARE ESSENTIAL: The carbon finance are used to subsidize the biomass cookstoves and the biomass pellets, but most importantly, to build up the biomass pellet supply chain. The main barrier for switching from LPG stoves to renewable biomass pellets is the inexistent supply chain. Once the primary barrier is tackled and the pellet supply chain is functioning, small- and medium size commercial kitchens will be able to afford efficient biomass cookstoves and biomass pellets at normal price.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/2497/

myclimate



MYANMAR MYANMAR STOVES CAMPAIGN



ORBIS DEVELOPMENT PARTNERS is a profit-for-purpose company which collaborates globally with responsible investors, companies and the not-for-profit sector to create market-based solutions for pressing environmental and social challenges. This project is being developed in partnership with the SLOW LIFE Foundation and Mercy Corps Myanmar.

PROJECT BENEFITS: The project targets households and institutions, such as monasteries, that use inefficient stoves for cooking. Working with Western technology partners, this is the first time that high quality efficient cookstoves reach Myanmar. Families predominantly use wood as fuel and this has led to massive deforestation and the loss of natural habitat for endangered species. Families spend many hours foraging for wood and increasingly have to purchase it from professional wood sellers. The Envirofit M-5000 wood stove, selected by the community, allows families to live a more healthy life, save money and time to invest in their business or in the education of their children. We have trained over 130 sales staff and are creating jobs on the ground. We are rigorously measuring our impact and hope to provide meaningful data and information to other development organisations in Myanmar.

"Using the new stove has improved my daily life. It produces almost no smoke and is much safer than the open fire I am used to."

WHY CARBON REVENUES ARE ESSENTIAL: Carbon revenues play an important role in addressing the issue of affordability and providing benefits to underprivileged communities. By targeting this customer group, the project aims to achieve the highest possible impact. The cost of the awareness raising campaign, rural education activities and the challenging logistical conditions affect operating costs, evidencing the need for carbon revenues. By subsidizing the cost of the high quality cookstove we allow families access to a product that meets their daily needs, is aspirational and very durable. A proportion of carbon income is used for a Village Development Fund that allows for additional investment in the community, for example in the area of agriculture productivity, reforestation and health.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/1675/



NEPAL NEPAL BIOGAS SUPPORT PROGRAM – POA



ATMOSFAIR is a climate protection organization focusing on travel. We actively protect the climate by offsetting greenhouse gases through offset projects mostly developed and financed in-house, particularly clean cookstove technologies.

PROJECT BENEFITS: The biogas program replaces non-renewable firewood for daily cooking and hence reduces poverty, greenhouse gas emissions and indoor-air-pollution. It prevents deforestation and thus avoids soil erosion and loss of biodiversity. Moreover, the animal dung used to produce biogas is for free, and the slurry generated during the process is a high-quality fertilizer for agriculture. Another advantage is the improvement of sanitary conditions because of the possibility of connecting a latrine with the system. The biogas units are constructed and maintained by locals, thereby creating jobs and generating income.

"The good part of this programme is that the user saves time for cooking and has lower expenses for fuelwood."

"There is no smoke as long as the biogas stove is burning. The flame can be controlled easily without hampering the cooking process."

WHY CARBON REVENUES ARE ESSENTIAL: Carbon revenues are used to further expand the program. PROJECT DEVELOPER PROFILE: http://cleancookstoves.org/partners/item/24/385



VIETNAM BIOGAS PROGRAM IN VIETNAM: BIOGAS PROGRAM FOR ANIMAL HUSBANDRY SECTOR OF VIETNAM





59

THE BIOGAS PROGRAM was initiated in 2003 by SNV (Netherlands Development Organization) with support of the Vietnamese and Dutch governments. With technical assistance from SNV, it is implemented by the Biogas Project Division (BPD), which is under the Department of Livestock and Production (DLP), Ministry of Agricultural and Rural Development (MARD). The Biogas Program (BP) provides small-holder farmers and households with livestock with climate friendly energy access off the grid.

PROJECT BENEFITS: The Biogas Program (BP) takes a long term approach to developing a household bio-digester market for small holder farmers in Vietnam. Already in 53 provinces, locally produced biogas digesters replace fossil fuels and reduce greenhouse gas emissions by converting animal manure into biogas for cooking and lighting purposes. Each biogas plant reduces approximately 6.4 tonnes/year of CO_2 via the replacement of fossil fuels, non-renewable biomass and methane avoidance from animal waste to biogas. A by-product, bioslurry, is used by farmers to improve soil fertility, and reduce the emissions of nitrous oxide (N2O). BP creates long term local employment opportunities as it provides over 1200 local masons, who supervise teams of two to five people, with training and employment. Staff of the provincial and district offices support with promotion, training, and supervision activities. In addition, indoor air pollution is also significantly reduced and keeps homes cleaner and odour free.

"After purchasing the digester, the biogas is free and sufficient for cooking and lighting needs. The bioslurry is great and helps vegetables to flourish with less need for pesticides. Our neighbors appreciate that there is not much smell from the manure anymore!"

-PHÚC TRẦN THI, from the Bách Thuận commune in Vietnam

WHY CARBON REVENUES ARE ESSENTIAL: Carbon revenues are required to ensure the long term viability of the program and support:

- Training of masons: Masons are 'certified' to install biogas digesters.
- Quality control and assurance: The project provides training to technicians, who ensure quality of the biogas units. During the first monitoring period 1000 technicians were trained.
- Promotion and marketing: Marketing material is required to disseminate information about the benefits of biogas, using communication channels like radio broadcasts, safety leaflets, brochures and uniforms for the masons and technicians.
- Research and development: A proportion of carbon finance is used for on-going research and monitoring activities. At present this is focused on supply chains for bioslurry as an organic fertilizer.
- Project management Unit (PMU): The training material is developed by PMU, which includes technician and mason manuals, user handbooks, and presentations on bioslurry.
- Monitoring and evaluation: The robust monitoring provides information on user satisfaction and identifies areas to improve in the project design.

PROJECT DEVELOPER PROFILE: http://cleancookstoves.org/partners/item/24/221

contact | DAGMAR ZWEBE, CHIEF TECHNICAL ADVISOR | DZWEBE@SNVWORLD.COM | HTTP://BIOGAS.ORG.VN/ENGLISH/HOME.ASPX |



LATIN AMERICA





BOLIVIA AND PARAGUAY ECOLOGICAL STOVES FOR BETTER LIVING



MYCLIMATE, a non-profit foundation based in Switzerland, is one of the world's leading providers of voluntary carbon offsetting measures. myclimate takes care of the project's entire carbon certification process. CEDESOL is a social and non-profit organization and the managing entity of the project. Sobre la Roca is a small enterprise with 12 years of manufacturing and training experience in the use of ecological stoves.

PROJECT BENEFITS: This programme includes the local production, promotion, education, distribution, installation and maintenance of improved cooking devices like efficient rocket stoves, solar stoves and heat retaining cooking devices. Our ecological fuel-efficient stove programme addresses the problems of deforestation, household air pollution, global warming and slow economic development in Bolivia and Paraguay. All beneficiaries are non-industrial cooks from three different sectors where wood is the primary fuel: domestic families, institutions like schools and commercial partners like restaurants or canteens. Environmental and social education is an integral and indispensable factor of the program. All the activities include a comprehensive education and monitoring programme whereby end-users receive training on the usage and benefits of the new technologies.

"The solar cooker is great. I can cook my food in the solar cooker and have 2-3 hours to weave while the food cooks. The solar cooker helps me to increase my income. Ten years ago there was enough wood around the house for cooking. Now the wood is far away."

-FELICIDAD ORELLANA, Cochabamba, Bolivia

WHY CARBON REVENUES ARE ESSENTIAL: Gold Standard certification gives the programme the needed funding. Revenues from carbon credits allow the project participants to offer the locally produced stoves at large scale at a subsidized price, compatible with local population's ability and willingness to pay for such a device, and to provide appropriate capacity building and follow-up. Without the support from carbon credits the stoves would not be marketable. It was demonstrated that the proposed Micro Scale Programme is a voluntary action, that no mandatory laws and regulations do exist in the programme countries to implement improved cooking. Despite the proposed programme with carbon finance, inefficient cooking devices are the only realistic scenario for the near future for Bolivian and Paraguayan cooking.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/2497/



GUATEMALA STOVE CAPITAL GUATEMALA IMPROVED STOVES AND WATER PURIFICATION PROJECT



THE PARADIGM PROJECT develops distribution networks in Guatemala in concert with local partners Socorro Maya and EcoFIltro that serve customers at the base of the economic pyramid. The project sells locally-made efficient stoves and water filters and uses carbon offset revenue to fund growth and keep product pricing low. As a result, we create tremendous social, economic and environmental impact in emerging markets.

PROJECT BENEFITS: The project was built around a simple premise: provide smart, simple products that work as promised, treat people with respect, empower them with choice and expect them to pay for something of real value. Paradigm is the first organization to bring a robust consumer products approach to the efficient stoves sector, helping it realize tremendous adoption rates and initial scale. The Guatemalan project provides tremendous financial, health and environmental benefits to local households and communities. It also provides jobs and large-scale commercial value for the Guatemalan people through locally-produced products.

"These products have are very good for us. Before buying these, my children were constantly sick from the smoke and the water. Today we have clean water to drink and no smoke in our house. Look at my kitchen. It's clean. The ceiling is no longer black. And I am using less than half the amount of wood I used before."

-MARIA RUIZ, 27 year old mother of 6, Xejeyup, Guatemala

WHY CARBON REVENUES ARE ESSENTIAL: Carbon revenues enable The Paradigm Project to reach the scale and sales volume necessary to operate a low-profit business model. Reaching remote rural areas with consumer durable goods is extremely expensive. Economies of scale are a must to be sustainable. Carbon revenue covers the gap between start-up and scale, allowing us to offer financing and retain viable consumer pricing on our products, even while spending heavily to promote products that require significant behavioral change As projects grow to scale, carbon revenue can help fund expansion into new countries or offset costs to reach areas of the country that are not commercially sustainable without those revenues because of geography or distance. While carbon revenue serves only as a start-up and growth agent for the business, without carbon revenues, the business model would not function.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/1912/



HONDURAS PROYECTO MIRADOR



ESTIMATED CREDITS 205,000 tCO₂ 140,000 tCO₂

STOVES DISTRIBUTED TO-DATE: 95,000



PROYECTO MIRADOR, a non-profit organization, sells Gold Standard carbon offsets to construct in-situ Dos por Tres plancha, chimney type stoves in poor, rural Honduras. Mirador builds over 2,000 stoves a month and has two years of backlog in stove requests. Families co-invest in stove construction with materials and time; no cash changes hands with our beneficiaries. Mirador emphasizes training and maintenance to ensure stoves survive for five years or more.

PROJECT BENEFITS: Dos por Tres cookstoves replace inefficient, smoky traditional Honduran mud stoves and according to third-party analysis, provide 10 times the stove cost in benefits to our 450,000 users. The benefits include reductions in respiratory illness, forest degradation (14-29 trees per stove), and carbon emissions (\sim 13 mtCO₂); as well as poverty alleviation through reduced fuelwood consumption and the creation of 17 microenterprises and 127 jobs.

The unique Mirador model covers all aspects of a successful business: high demand, lowest price, local supply, marketbased incentives, structures for rapid growth, and metrics to monitor stove use. Stoves are built by outsourced small businesses using locally sourced materials. Each stove is marked with a GPS and tracked on Mirador's Salesforce.com database. Mirador conducts five trainings with users, including three educational visits post construction. Surveys on stove use and maintenance are collected on handheld devices and stored in Mirador's database of 150,000 surveys.

> "I had chest problems with my other stove but today, no – with this, no problems. I am really happy with wood savings and the way it heats up, too." -SRA. ULLOA REDONDO

WHY CARBON REVENUES ARE ESSENTIAL: All carbon revenues are returned to Honduras and invested directly in the Honduran registered non-profit, Proyecto Mirador, LLC, for the construction of stoves in rural Honduras. Administration, travel and employment related to Proyecto Mirador Foundation (U.S.) are funded separately, not by carbon revenues.

PROJECT DEVELOPER PROFILE: http://cleancookstoves.org/partners/item/24/806

contact | DEE LAWRENCE | DLAWRENCE@PROYECTOMIRADOR.ORG | WWW.PROYECTOMIRADOR.ORG (ENGLISH) ES.PROYECTOMIRADOR.ORG (SPANISH)

63



MEXICO, EL SALVADOR, HONDURAS AND GUATEMALA UTSIL NAJ (HEALTHY HOMES FOR ALL) IMPROVED COOKSTOVES AND WATER FILTERS DIFFUSION PROGRAMME



MICROSOL is a social company leading carbon services in Latin America for seven years and involved in the access to vital energetic and water services. It replicated in Central America an innovative solution formerly successfully tested in Peru in order to support the diffusion of appropriate technologies for rural populations in a situation of extreme poverty. This new PoA ensures access to carbon finance both for improved cookstoves and water filter projects and measures its triple impact: social, economic and environmental. A specific attention was given to adapt to the local uses of the technologies and to cultural dimensions.

PROJECT BENEFITS: Projects results are yet to be certified but include health, economic and social dimensions.

WHY CARBON REVENUES ARE ESSENTIAL: Carbon revenues are used by the implementing agencies to secure the short and long term financing needs of project implementation thereby ensuring continuity. Besides the partial subsidies for the purchase of the technologies, local partners agree to primarily invest the funds in monitoring, maintenance services and capacity building exercises. The secondary use of the funding is to scale-up the project and organize outreach activities and local lobbying.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/2148/

contact ARTHUR LAURENT ALAURENT@MICROSOL-INT.COM HTTP://EN.MICROSOL-INT.COM/



PERUQORI Q'ONCHA (GOLDEN STOVE)IMPROVED COOKSTOVES DIFFUSION PROGRAMME IN PERU



 ESTIMATED FUTURE ISSUANCES FOR SALE

 YEAR
 2015 & 2016
 2017

 ESTIMATED CREDITS
 300,000 tCO2
 300,000 tCO2

STOVES DISTRIBUTED TO-DATE: 107,812



MICROSOL is a social company leading carbon services in Latin America for seven years and involved in the access to vital energetic and water services. It created an innovative solution to tackle the local dynamics of poverty through appropriate technologies, launching the Qori Q'oncha Programme of Activities (PoA) for rural populations in a situation of extreme poverty. This PoA ensures access to carbon finance and measures the projects' triple impact: social, economic and environmental A specific attention was given to adapt to the local uses of cookstoves and to cultural dimensions.

PROJECT BENEFITS: In Peru, rural populations in a situation of poverty cook on traditional stoves which are not efficient, polluting and hazardous with consequences on the health of families and particularly on women and young children who are the first affected by severe respiratory and eye diseases.

The improved cookstoves distributed in the framework of the Qori Q'oncha programme are equipped with a chimney to vent the smoke out of the house, these stoves are more efficient and therefore reduce CO_2 emissions and deforestation. Improved cookstoves are also great tools for women empowerment, allowing them to cook more quickly, but also to reduce the chore of wood and freeing up time for the education of children.

Here are some results of the programme:

- Enabled 107,812 families to use these technologies.
- Reduced carbon emissions by nearly one million tonnes of CO₂.
- Reduced an average of 1.9 tonnes in wood consumption that is 2.5 tonnes of CO₂ per family which corresponds to reducing wood consumption by 39% (in Peru).
- Saved up to \$39 a month in fuel expenditure, or six hours time for wood collection.
- A drastic reduction in smoke exposure in 100% of families thanks to the installation of a chimney.
- A satisfactory rate of 99% for these technologies.

"Before the smoke used to make us cry but not any longer, it is a lot better now. There is no smoke anymore, now everything's clean and we no longer absorb the smoke that used to make us ill. Now everything's better, cleaner, and we consume a very little amount of firewood."

-TEÓFILO BENAVENTE PINTO, 64 years old – beneficiary of Qori Q'oncha from Chiguata, Arequipa

WHY CARBON REVENUES ARE ESSENTIAL: Carbon revenues are used by the implementing agencies to secure the short and long term financing needs of the cookstove projects thereby ensuring continuity. Besides the partial subsidies for the purchase of cookstoves, local partners agree to primarily invest the funds in monitoring, maintenance services and capacity building exercises. The secondary use of the funding is to scale-up projects and develop oureach activities and local lobbying.

PROJECT DEVELOPER PROFILE: http://carbonfinanceforcookstoves.org/connect/profile/2148/

contact ARTHUR LAURENT ALAURENT@MICROSOL-INT.COM HTTP://EN.MICROSOL-INT.COM

CARBON CREDIT ADVISORY AND RETAIL SERVICE PROVIDERS

Why Use A Carbon Credit Advisory and Retail Service Provider?

Carbon credit advisors and retail service providers work with their corporate, NGO, and public sector clients to provide a cohesive set of carbon management services tied to their overall environmental goals and broader organizational strategy. Advisors and retail service providers forge long-term relationships with their clients, identifying and clarifying the range of options available and which will create the most value. They can advise and educate on how to effectively and efficiently integrate carbon offset projects into carbon management, CSR, and sustainability strategies. Based on clients goals, values, geographical requirements, and budgets, advisory and retail service providers can help choose a single project or can draw together a portfolio of projects. Carbon credit advisory and retail service providers also offer other services for a one-stop shop for carbon management services, including project development, carbon footprinting, and carbon neutral certification.

Retailer Services



CARBON OFFSETTING

Assistance in identifying and purchasing carbon offsets to manage unavoidable emissions by sourcing credits on your behalf from clean cooking projects around the world.



CONSULTING AND ADVISORY SERVICES

Providing the knowledge and networks to assist in designing the right program to match individual corporate values and goals as part of a broader climate change strategy.



NEW PROJECT DEVELOPMENT

Capability to expand existing or develop new projects allowing you to support provision of clean cookstoves in communities that have relevance for your organization e.g. in your supply chain or in key markets.



CARBON FOOTPRINTING

Measuring and quantifying a client's carbon footprint in accordance with internationally recognized protocols.



CLIMATE OR CARBON NEUTRAL CERTIFICATION

Certification provides a third party guarantee for quality and integrity, helps clients differentiate themselves, engages employees and stakeholders, and provides a clear sign you're leading the way on climate change.



OFFICE LOCATION: LONDON GEOGRAPHIC FOCUS: WORLDWIDE

SERVICES PROVIDED





Carbon Offsetting

Consulting and Advisory Services

CARBON CLEAR is a world leading provider of carbon management and offsetting services. We help our clients put carbon reduction at the heart of your business to compete and prosper in a low-carbon world. We work with businesses from all areas of industry, from NGOs to FTSE 100 companies. Organisations choose Carbon Clear as their carbon management partner because our expertise, delivery capability, and consultative approach help them achieve their sustainability goals on time and within budget.

Our approach is to offer a complete carbon service, from calculating emissions, to defining a strategy and buying carbon credits.

We believe corporate offsetting offers a range of benefits to the customer as well as the communities where the projects are based. Certainly, our Darfur Low Smoke Stoves project has a proven track record of delivering high impact change for both.



New Project Development





Carbon Footprinting

Climate or Carbon Neutral Certification



CASE STUDY: We have worked with many organisations to develop their carbon offsetting strategy and achieve carbon neutrality.

One of these, CoopeDota is a coffee cooperative in Costa Rica supplying major brands like Starbucks around the world. Concerned by the effect of climate change on the coffee industry, the members of the CoopeDota cooperative wanted to take the bold action of becoming the first PAS 2060 carbon neutral coffee cooperative.

Our team worked with CoopeDota staff to identify carbon reduction opportunities and construct a clearly defined carbon management plan for each product with reduction targets and a path to reach those goals.

PAS 2060 has enabled CoopeDota to charge a premium for their carbon neutral coffee product, improving the economic and social welfare of cooperative farmers. The PAS 2050 carbon footprint process identified the most significant emissions sources such as raw materials, and use of fertilizers, which supported the development of a cost-effective reduction plan. All unavoidable emissions were then offset against a carbon project that delivers multiple benefits to the community.

By gaining PAS 2060 certification, CoopeDota have become a leader in the climate change fight, inspiring Costa Rican businesses and the coffee industry across the world.

TYPES OF CLIENTS: CORPORATE | SMALL AND MEDIUM SIZED BUSINESSES | PUBLIC SECTOR | NGOS |

\\/\\/\/	CARBON-CLEAR COM	
VV VV VV	CARDON-CLEAR.COM	

contact for buyers	OLIVIER LEVALLOIS	OLEVALLOIS@CARBON-CLEAR.COM	T: +44 203 589 9432
contact for sellers	OLIVIER LEVALLOIS	OLEVALLOIS@CARBON-CLEAR.COM	T: +44 203 589 9432


CLIMATEFOCUS

OFFICE LOCATIONS: AMSTERDAM, WASHINGTON, D.C., BERLIN, BOGOTA

GEOGRAPHIC FOCUS: AFRICA, ASIA, LATIN AMERICA

SERVICES PROVIDED

New Project

Development



Consulting and Advisory Services





Carbon Footprinting

"In 2011 Hivos selected Climate Focus to design a a domestic biogas project in Indonesia domestic biogas in Indonesia. Since then we have increased the number of assignments, basically because of the quality of the service."

CASE STUDY: The Indonesian Domestic Biogas Programme (IDBP) promotes the use of biodigesters as a local, sustainable energy source through a commercial, market-oriented approach. As low-income dairy farmers targeted under the programme cannot afford to purchase domestic biodigesters, IDBP subsidises the investment costs associated with the acquisition of the technology. Carbon revenues generated through the sale of Gold Standard VERs play an important role in supporting the long-term financial sustainability of the programme, which has distributed 15,000 biogas digesters across nine provinces to date.

Climate Focus assisted IDBP in the feasibility study, baseline surveys and registration activities under The Gold Standard in 2013; followed by support in monitoring and reporting. The programme was issued carbon credits in 2014. Climate Focus is assisting IDBP through its second verification round, and in monitoring performance using innovative, smartphone applications and cloud-based data storage (MRV+). The IDBP is an initiative of Hivos and SNV, and is managed by Yayasan Rumah Energi."

TYPES OF CLIENTS: CORPORATE | SMALL AND MEDIUM SIZED BUSINESSES | PUBLIC SECTOR | NGOS |

WWW.CLIMATEFOCUS.COM

contact for buyers	ADRIAAN KORTHUIS	A.KORTHUIS@CLIMATEFOCUS.COM	T: +31 20 262 10 31
contact for sellers	ADRIAAN KORTHUIS	A.KORTHUIS@CLIMATEFOCUS.COM	T: +31 20 262 10 31

Climate Neutral Group ©

for better business

OFFICE LOCATION: THE NETHERLANDS GEOGRA

GEOGRAPHIC FOCUS: WORLDWIDE







Carbon Offsetting

Consulting and Advisory Services

CLIMATE NEUTRAL GROUP is a social venture that strives towards a 100% climate-neutral world. Our mission is to help as many organisations as possible to make the transition to climate-neutrality and to develop climate-neutral services and products for their customers. We provide carbon offsetting with highest quality projects, fulfilling the strictest criteria.



New Project Development





Climate or Carbon Neutral Certification



"To reduce the CO₂-emissions, Climate Neutral Group performed the TravelScan. This gives us detailed insight in our travel-behaviour and how to adjust it. As last step we have chosen for offsetting via clean cookstoves in Kenia." -HENRIETTE DAVELAAR – PGGM

CASE STUDY: Noordhoff Publishers develops professional teaching materials for children. To achieve a good future for new generations, with sustainability in the broadest sense of the word, they asked Climate Neutral Group for help in making sustainability an integral part of their policy. A CNG consultant worked with Noordhoff to define their goal for climate-neutral business practice, in line with their vision and mission. We helped them to bring the formulation of the goal in line with the SMART criteria, including clear emission reduction targets, which led to a high degree of clarity about the next steps to be taken.

Noordhoff now has an integrated sustainability strategy, implement reduction measures and create awareness. Finally, they become a climate-neutral company, followed by climate-neutral books.

TYPES OF CLIENTS: CORPORATE | SMALL AND MEDIUM SIZED BUSINESSES | PUBLIC SECTOR | NGOS |

WWW.CLIMATENEUTRALGROUP.COM/EN

 contact for buyers
 MARK HUIS IN 'T VELD
 MARK.HUISINTVELD@CLIMATENEUTRALGROUP.COM
 T: +31.30.2326.185

 contact for sellers
 LENE KEERBERG
 LENE.KEERBERG@CLIMATENEUTRALGROUP.COM
 T: +31.30.2326.184

72



OFFICE LOCATIONS: LONDON, NAIROBI GEOGRAPHIC FOCUS: WORLDWIDE

SERVICES PROVIDED





Carbon Offsetting

Consulting and Advisory Services





New Project Development



Carbon Footprinting



Climate or Carbon Neutral Certification



"Working together with the innovators and experts at ClimateCare has helped us think differently about the best way to meet our sustainability targets." –JAGUAR LAND ROVER

CASE STUDY: We've helped hundreds of clients get more from their sustainability investments delivering value for their business while reporting robust, measurable impacts such as environmental protection, improved health, employment generation and more. Key supporters of ClimateCare cookstove projects include Jaguar Land Rover, who funded the first ever Gold Standard cookstove project through ClimateCare, and who have helped provide stoves to 832,000 families. Jaguar Land Rover has now set an ambitious target to create opportunities for 12 million people by 2020. It will deliver five million of these through support of Climate+Care programmes that both improve lives and protect the environment.

Other businesses such as The Co-operative and Aviva have also made significant contributions helping to fund stoves to 350,000 and 57,000 families respectively.

ClimateCare also works with the public sector, for example the Swedish Energy Agency, who committed to purchase the first 500,000 tonnes of emissions reductions from ClimateCare's CookClean project in Ghana.

TYPES OF CLIENTS: CORPORATE | SMALL AND MEDIUM SIZED BUSINESSES | PUBLIC SECTOR | NGOS |

WWW.CLIMATECARE.ORG

contact for buyersROBERT STEVENSROBERT.STEVENS@CLIMATECARE.ORGT: +44(0)1865 591 027contact for sellersELIZABETH WILLIAMSELIZABETH.WILLIAMS@CLIMATECARE.ORGT: +44(0)1865 591 020



OFFICE LOCATIONS: TAUNTON, NAIROBI, KAMPALA GEOGRAPHIC FOCUS: AFRICA

SERVICES PROVIDED





Carbon Offsetting

Consulting and Advisory Services

CO2BALANCE is a UK based project developer, offset retailer and carbon management consultant. Our mission is to catalyse offset projects in the developing world that deliver measurable, additional benefits for the local economy, society and environment. We pride ourselves in offering services at all stages in the offset process, from measuring an organisational carbon footprint, certifying carbon neutrality, advising on carbon reduction through to developing bespoke carbon offset projects. We have distributed over 80,000 improved cookstoves of our own design across Africa, issuing credits under the GS, VCS and CDM standards. We offer this unrivalled experience to our clients as a project development consultancy service.



New Project Development





Climate or Carbon Neutral Certification



"We started working with CO2balance to finalise a cookstove project in Eritrea. They have been very supportive and adaptive in finding a solution that meets our needs." –JOHN GILLILAND, Head of Programmes, Vita.

CASE STUDY: CO2balance have been working with Toshiba TEC to offset the carbon emissions from their Multi-Functional Printers to make them "CarbonZero"; their offsetting program includes support of CO2balance's Kenyan Energy Efficient Stove Project which has positively impacted thousands of families throughout Kenya. As well as fitting into the company's wider corporate environmental objectives, the wide ranging co-benefits of the cookstove program has been used to provide market differentiation to good effect in a competitive market and has been well received by its customers.

TYPES OF CLIENTS: CORPORATE | SMALL AND MEDIUM SIZED BUSINESSES | PUBLIC SECTOR | NGOS |

WWW.CO2BALANCE.COM

contact for buyers	RICHARD ILIFFE	RICHARD.ILIFFE@C02BALANCE.COM	T: +44 1823 332233
contact for sellers	PAUL CHIPLEN	PAUL.CHIPLEN@CO2BALANCE.COM	T: +44 1823 332233

Carbon Credit Advisory and Retail Service Providers



OFFICE LOCATIONS: PARIS, LYON, TOULOUSE, EMBU, NAIROBI, SAO PAOLO

GEOGRAPHIC FOCUS: WORLDWIDE







etting Consulting and Advisory Services

ECOACT is a specialized consultancy and international leader in voluntary carbon reduction and offsetting strategies in addition to developing carbon mitigation projects. We work with companies and organizations to measure, reduce, offset and communicate on their footprint and provide several services (carbon footprint, LCA, IT carbon tools, retail of carbon offsets, project and feasibility studies as well as project development). We have a global presence with offices in Europe, Africa and South America and are a recognized cookstoves project developer in Kenya. We provide our clients full support to build a successful carbon management strategy that engages relevant stakeholders needs, is in line with company values, and maximizes the return on investment.



New Project Development



Carbon Footprinting



Climate or Carbon Neutral Certification



"EcoAct handled project management with accuracy, upheld by strong, wide knowledge on carbon program development...which allowed us to be one of leading Global 50 companies in CSR and sustainable development."

CASE STUDY: EcoAct has been working with La Poste group internationally, including several group subsidiaries all around Europe, Asia, Africa and North America, on their carbon management strategy from 2011 to 2018. In this context, EcoAct has helped the client reshape their CSR strategy around the 4 pillars of measure, reduce, offset and communicate on their carbon footprint, engage stakeholders and achieve international recognition as one of the most exemplary initiatives worldwide. Our team allowed La Poste to create specific project methodologies, build a project portfolio to offset on average of around 1,000,000 teqCO₂ per year, and match company values and activities to the long-term support of carbon offsetting project. We also ensured stakeholder engagement in the strategy via actions such as an internal votes by the company employees, clients and stakeholders. By defining and communicating the strategy, EcoAct and La Poste are internationally recognized as leaders in business and sustainability.

TYPES OF CLIENTS: CORPORATE | SMALL AND MEDIUM SIZED BUSINESSES | PUBLIC SECTOR | NGOS | OTHER: CARBON FUNDS, INTERNATIONAL ORGANISATIONS

WWW.ECO-ACT.COM								
contact for buyers	GIULIO BERRUTI	GIULIO.BERRUTI@ECO-ACT.COM	T: +33661467656					
contact for sellers	GIULIO BERRUTI	GIULIO.BERRUTI@ECO-ACT.COM	T: +33661467656					



OFFICE LOCATION: ZURICH GEOGRAPHIC FOCUS: AFRICA, ASIA, LATIN AMERICA

SERVICES PROVIDED





Carbon Offsetting

Consulting and Advisory Services





New Project Development





Carbon Footprinting





"Voluntary carbon offsetting with myclimate is a major instrument within our sustainability management. We are happy to see, that every second guest shares these values and voluntarily offsets accommodation emissions."

-RENÉ DOBLER, CEO Swiss Foundation for Social Tourism

CASE STUDY: The collaboration between KYOCERA Document Solutions Germany and myclimate Germany pertains to the CO₂ offsetting of printing and multi-purpose systems within the framework of the PRINT GREEN initiative. Additionally, all KYOCERA toner cartridges that are distributed by KYOCERA Germany have been made climate neutral with myclimate. All resulting greenhouse gas emissions are offset in the myclimate carbon offset project "Energy Efficient Cookstoves for Siaya Communities" in Kenya. "Our investment in this area so far is large, and represents a clear signal in favour of climate protection", says Reinhold Schlierkamp, Managing Director of KYOCERA. Thanks to the involvement of KYOCERA, significantly more efficient stoves can be distributed to households in Kenya.

TYPES OF CLIENTS: CORPORATE | SMALL AND MEDIUM SIZED BUSINESSES | PUBLIC SECTOR | NGOS | OTHER: CARBON FUNDS, INTERNATIONAL ORGANISATIONS

 WWW.MYCLIMATE.ORG

 contact for buyers
 KATHRIN DELLANTONIO

 INFO@MYCLIMATE.ORG
 T: +41 44 500 43 50

 contact for sellers
 FRANZISKA HEIDENREICH

 PROJECTS@MYCLIMATE.ORG
 T: +41 44 500 43 50



OFFICE LOCATION: **PHNOM PENH** GEOGRAPHIC FOCUS: **ASIA**

SERVICES PROVIDED



Consulting and Advisory Services

NEXUS is a cooperative of development organizations, pooling our members' experience and building an attractive, credible portfolio of impact for investors, connecting our network to new funding sources.

Nexus opens doors to sources of funding and expertise that enables projects to reach their full potential. Nexus offers guidance and tools that inspires the confidence to enable project impacts.

Nexus provides simple solutions to major global challenges, like poverty and climate change, by producing hope and opportunity to people who need it most.



New Project Development



Carbon Footprinting



"Offsetting needs to be more than just a simple statement for us and our clients. Nexus' award winning projects always have a strong story that stands up to scrutiny from a large and varied audience. Also, Nexus' approach ensures that funds are going directly to the project activity." –VEOLIA-EAU, France

TYPES OF CLIENTS: CORPORATE | SMALL AND MEDIUM SIZED BUSINESSES | PUBLIC SECTOR | NGOS |

WWW.NEXUS-C4D.ORG | contact for buyers | PARTNERSHIPS@NEXUS-C4D.ORG | T: +85523990591 | | contact for sellers | ANA CARPINTEIRO | A.CARPINTEIRO@NEXUS-C4D.ORG | T: +855 (0)92 563803 |



OFFICE LOCATION: **LONDON** GEOGRAPHIC FOCUS: **WORLDWIDE**

SERVICES PROVIDED



NUMERCO LIMITED is an award winning independent commodity supply agent, specialising in both the sourcing and supply chain optimisation of esoteric physical materials, energies and industrial products. Headquartered in the UK, our aim is to provide professional agency supply services through our well established sourcing and distribution networks, coupling expertise on both the development and aggregation of global sources of production.

Numerco was voted best carbon broker in the 2014 Voluntary Carbon Market Rankings by *Environmental Finance* magazine.

"Numerco was voted best carbon broker in the 2014 Voluntary Carbon Market Rankings by Environmental Finance magazine."

-Source: www.environmental-finance.com/assets/images/charts/VCMR14-TABLE.gif

CASE STUDY: A Kenya Cookstove developer approached Numerco at pre validation stage looking for a forward buyer to offtake volume to enable future security and expansion of stove production and sales. Numerco secured a buyer on a five year forward basis.

TYPES OF CLIENTS: CORPORATE | SMALL AND MEDIUM SIZED BUSINESSES | PUBLIC SECTOR | NGOS |

WWW.NUMERCO.COM

contact for buyersGARETH TURNERGARETH.TURNER@NUMERCO.COMT: +44 2037134481 / +447771373998contact for sellersGARETH TURNERGARETH.TURNER@NUMERCO.COMT: +44 2037134481 / +447771373998



OFFICE LOCATIONS: ZURICH, LONDON, STOCKHOLM, SAN FRANCISCO, MEXICO CITY, MEDELLIN, SAO PAULO, ADDIS ABABA, NEW DELHI, BEIJING, HONG KONG, HANOI, JAKARTA, BANGKOK, SYDNEY, MELBOURNE

GEOGRAPHIC FOCUS: WORLDWIDE

SERVICES PROVIDED



Consulting and Advisory Services









Climate or Carbon Neutral Certification

SOUTH POLE GROUP is a leading sustainability solution provider. The company headquartered in Zurich operates with 16 offices and spans six continents.

Initially focused on the development of premium carbon emission reduction projects, the company now offers a wide spectrum of sustainability services, including climate policy and strategy advisory. Its expertise covers the areas of climate change, forests and land use, water, sustainable cities and buildings, as well as renewable energy and energy efficiency. The company is determined to help its clients grow their business with ground breaking solutions which positively impact the environment and the needs of society.



"south pole group is an important partner for CDP, we collaborate among others on climate impact assessment of investment portfolios."

-SUSAN DREYER, Director DACH Region, CDP

CASE STUDY-COOP SWITZERLAND & WWF: Our successful cooperation with Coop Switzerland and WWF represents a long-term carbon finance project developed on behalf of a reputable client with a serious commitment to society and to the environment. In 2010, Coop and WWF approached us to set up a project within Coop's value chain. The initial four-year mandate instructed us to propose suitable projects, to co-finance them upfront, to take care of project design and to deliver related project credits. Two years later, the Mamize cookstove project in the Sichuan province of China, one of only three natural habitats of the Giant Panda, became the world's first 'insetting' project: this Gold Standard microscale project replaces inefficient cooking methods with efficient wood stoves, saving firewood and reducing emissions. It improves people's quality of life and reduces the pressure on nearby forests. A total of 1,600 efficient cookstoves were installed, benefitting health, income and living conditions of about 4,800 people.

TYPES OF CLIENTS: CORPORATE | SMALL AND MEDIUM SIZED BUSINESSES | PUBLIC SECTOR | NGOS |

THESOUTHPOLEGROUP.COM

contact for buyersNATALIA GORINAN.GORINA@THESOUTHPOLEGROUP.COMT: + 41 435013573contact for sellersMARCO MAGINIM.MAGINI@THESOUTHPOLEGROUP.COMT: +41 43 501 35 70



OFFICE LOCATIONS: LONDON, NEW YORK GEOGRAPHIC FOCUS: WORLDWIDE

SERVICES PROVIDED





Carbon Offsetting

Consulting and Advisory Services

THE CARBONNEUTRAL COMPANY is a worldleading provider of solutions to businesses reducing their environmental impacts. Over the last 17 years we have built extensive experience of sourcing the highest quality carbon-financed projects which meet our clients' wide-ranging requirements. We work with more than 350 clients around the world, including M&S, Microsoft, Sky, Avis and UPS, delivering emission reduction projects which also align with their supply chain and citizenship goals: our Sustainable Impacts framework provides a robust and credible process to demonstrate the positive health and well-being, financial, food and biodiversity impacts which our clients deliver to families and communities through the projects they support.



New Project Development





Climate or Carbon Neutral Certification



"The CarbonNeutral Company has been an invaluable partner to Marks & Spencer's carbon neutral achievement and was instrumental in bringing to life UNICEF's first efficient cookstove project to improve the lives of children in Bangladesh. Working closely together Marks & Spencer, The CarbonNeutral Company and UNICEF created this ground breaking Gold Standard project made possible by the use of carbon financing and demonstrating M&S's commitment to both carbon neutrality and to improving the welfare and well-being of children."

-MIKE BARRY, Head of M&S Plan A

CASE STUDY: In May 2012 Microsoft made a companywide commitment to carbon neutrality and launched an innovative carbon fee model that holds each business group financially responsible for the cost of reducing and compensating for their carbon emissions. The funds raised by Microsoft's carbon fee are used to support a range of internal and external emission reduction and renewable energy activities, including carbon offsetting. Microsoft has worked with The CarbonNeutral Company to create an offset strategy which delivers a global portfolio of high quality projects and also aligns with other business objectives on citizenship and showcasing the role of technology. Projects are selected which use technology in some way, such as cookstoves, solar power, or water filtration, and are based in least developed countries. The CarbonNeutral Company also uses its Sustainable Impacts framework as a credible, transparent process to demonstrate how Microsoft's carbon offset portfolio is delivering benefits to communities through job creation, health and well-being improvements, education, women's empowerment and biodiversity protection.

TYPES OF CLIENTS: CORPORATE | SMALL AND MEDIUM SIZED BUSINESSES | NGOS |

WWW.CARBONNEUTRAL.COM

contact for buyers | SALES@CARBONNEUTRAL.COM | T: +44 207 833 6000 |

contact for sellers | CARBONSOURCING@CARBONNEUTRAL.COM | T: +44 207 833 6000



carbonfinanceforcookstoves.org | info@cleancookstoves.org