

ClimateCare Portfolio of Projects 2011

The offsets available for purchase from ClimateCare online will fund the following projects. You can find greater detail and information on all of these on our website [here](#).

Project	Country	Type	Standard	Expected Vintage	Registry	% of Portfolio
Nahar Biomass	India	Biomass Power	VCS	2007	APX	7%
Taiwan Wind	Taiwan	Wind Power	GS	2009	APX	7%
Phulpur Farmers	India	Fuel Switch	VCS	2006 and 2007	APX	22%
Treadle Pumps	India	Human Power	VCS	2010 and 2011	APX	14%
Ghana Stoves	Ghana	Efficient Stoves	GS	2011	GS	7%
Cambodia Stoves	Cambodia	Efficient Stoves	VCS	2009	APX	7%
Mani Micro Hydro	China	Hydro	VCS	2009	APX	30%
Uganda Stoves	Uganda	Efficient Stoves	GS	2008	GS	7%

India

Nahar Biomass

VCS

Summary

The Nahar Textile Mill in Punjab historically used carbon intensive grid electricity and fuel oil. Using carbon finance, it was able to clean up its operations by using waste rice husk as a fuel to generate heat and power. Nahar was the first textile mill in the region to convert to renewable biomass fuel, and acts as a flagship across the region; encouraging renewable power generation.



Social and economic benefits:

- A new market for waste rice husk has arisen, providing income to local farmers and those involved in its supply.
- Local people were employed during its construction.
- Staff were trained to man the new boiler, increasing the value of their skills.

Taiwan

Wind

Gold Standard



Summary

Power generated from fossil fuel dominates the electricity grid in Taiwan despite the country's abundance of wind resource both on and offshore, which can be used for clean power generation. This project involves the development of two wind farms on the west coast of Taiwan and comprises 62 turbines in total.

Social and economic benefits:

- Creates local employment during the construction and operational phases.
- Contributes to the development of the wind energy sector in Taiwan and reduces local pollutants such as soot and SO₂ associated with fossil fuelled electricity generation.
- Provides clean electricity to the equivalent of 110,000 Taiwanese households' annual demand.

India

Phulpur Farmers

VCS

Summary

Naphtha is a highly toxic and carbon intensive fossil fuel made from the distillation of petroleum or coal, and can cause severe health implications on contact. Its use is widespread throughout India as a fuel in the fertiliser production process and emits high levels of greenhouse gases. Through carbon financing, it has been possible to switch from naphtha fuel to cleaner natural gas at a fertiliser plant in Uttar Pradesh, paving the way for other factories in the industry to follow suit.



Social and economic benefits:

- Improved air quality in the plant and surroundings.
- Capacity building for workers in the form of technical training and development.
- The success of this project will encourage other fertiliser manufacturers across India to do the same.

India

Treadle Pumps

VCS



Summary

The diesel-powered pumps typically hired by Indian smallholder farmers to irrigate their fields are expensive, carbon-intensive, and inefficient. This project promotes and distributes Treadle Pumps, an alternative low-cost, low-tech method of irrigation which uses human power to lift the water with a 'stepping' action. They can be used to irrigate crops year-round in a cost effective manner, often meaning that an extra crop can be grown each year. The project helps smallholder farmers reduce their costs by eliminating the need to hire diesel pumps and pay for the fuel, whilst also improving crop yields.

Social and economic benefits:

- The Treadle Pump eliminates the inconvenience and cost of hiring and operating diesel pumps.
- Numerous jobs have been created throughout the distribution networks.
- Farmers can irrigate in a timelier manner and can grow different crops, often doubling their income and improving their quality of life.

Ghana

Improved Stoves

Gold Standard

Summary

Most families in Ghanaian towns and cities cook with wood-derived charcoal using an inefficient metal grate or 'coal-pot', which uses a lot of fuel. This has serious consequences in Ghana where the rate of deforestation is one of the highest in Africa. The Ghana Stoves project introduces the Gyapa, an insulated and efficient charcoal stove, to families in Ghana. The Gyapa stove cooks food more quickly, requires less fuel and is less smoky. Carbon finance allows the stoves to be marketed at an affordable price, whilst building on manufacturing skills, marketing channels and the fuel supply chain.



Social and economic benefits:

- Improves users' health by reducing exposure to hazardous air pollutants.
- Reduces wood demand, reducing pressure on forests and slowing deforestation.
- Provides additional income to many businesses within the Gyapa supply chain.

Cambodia
Improved Stoves

VCS


Summary

The majority of Cambodians rely on fuel wood and charcoal when cooking their meals, driving deforestation in Cambodian forests. By replacing the traditional inefficient cooking pot with a new improved version, this project brings about substantial savings in the amount of charcoal fuel required to cook a meal. The new stove also produces less smoke, reducing the cook's exposure to associated hazards and thereby improving health.

Social and economic benefits:

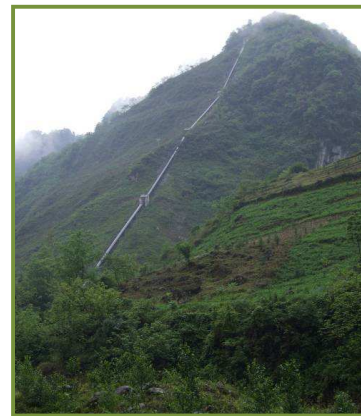
- Reduces time spent gathering fuel wood and saves families' money.
- Decreases pressure on forests and conserves biodiversity.
- Builds human and institutional capacity through the supply chain.
- This project is now bringing about significant market transformation.

China
Hydro

VCS

Summary

Mani hydro power station is based in the remote mountain village of Yonghong, on the banks of the River Yinhe in China. It generates approximately 60 MWh of clean energy annually, from turbines located at the foot of a 400m sloped channel diverted from the river. Carbon financing has allowed the project to go ahead in this remote and difficult location, connecting the local community to a power source for the first time, with improved health, education, and living standards in surrounding villages.


Social and economic benefits:

- Employment opportunities in the project's construction, operation, and maintenance.
- New income has provided an injection of cash into this rural community, improving the area's economic development.
- Provides stimulation for the nascent Chinese hydro-power industry.

Uganda
Improved Stoves

Gold Standard


Summary

Uganda is experiencing high rates of deforestation owing largely to a dependence on wood fuels for domestic and institutional cooking. More than 95% of Ugandans rely on these fuels for cooking. Typical stoves have low efficiencies and so use unnecessarily large amounts of wood and wood-derived charcoal. The project aims to transform the market for cooking appliances in Kampala and elsewhere in Uganda, by establishing a sustainable business and marketing network for the widespread dissemination of fuel-efficient stoves.

Social and economic benefits:

- Increased family incomes through reduced expenditure on wood fuel.
- Less kitchen smoke and consequently improved health.
- Reduces deforestation in Uganda.



Visit www.jpmorganclimatecare.com to offset your emissions and fund these important projects and technologies operating to international standards.

Please note:

1. Forward delivery VERs may be delivered in a slightly earlier or later vintage depending on the performance of the project.
2. Specific projects offered may under-perform and provide lower than expected volumes for forward vintages, despite our best endeavours. To guard against this risk, we adjust down all the volumes expected from our projects based on a wide number of different criteria including similar projects' performance in the past. This means that we reserve a proportion of the VERs we expect to achieve from any project and do not sell these VERs until delivery finally occurs.
3. In the event that a project fails to be registered on an eligible registry or is reasonably unlikely to generate a sufficient number of VERs to satisfy portfolio allocation, ClimateCare reserves the right to satisfy its obligations in respect of the shortfall by retiring a volume of reasonably comparable VERs equal to the shortfall quantity from similar project(s) of a comparable quality and standard.

ClimateCare is a business unit of JPMorgan. JPMorgan is a marketing name for the investment banking businesses of JPMorgan Chase & Co. and its subsidiaries worldwide. Securities, syndicated loan arranging, financial advisory and other investment banking activities are performed by a combination of J.P. Morgan Securities Inc., J.P. Morgan plc, J.P. Morgan Securities Ltd. and the appropriately licensed subsidiaries of JPMorgan Chase & Co. in Asia-Pacific, and lending, derivatives and other commercial banking activities are performed by JPMorgan Chase Bank, N.A.