CARBON OFFSET

Northwest Sichuan Afforestation/Reforestation

THE WORLD’S FIRST AFFORESTATION PROJECT TO

ACHIEVE STRINGENT CDM & CCB STANDARDS

CLIMATE

COMMUNITY

BIODIVERSITY
Why Carbon and Carbon Actions?
Carbon has become the common denominator for measuring carbon emissions, whether they are generated from energy, water, waste or food. Talking about “green” is not tangible. Carbon in tonnage is a measurable unit applicable to individual lifestyle, business operations and industrial operations in terms of carbon footprint. Carbon actions are actions that either 1) actively reduce individual and collective carbon footprint or 2) offset carbon emission by purchasing carbon credits that support verified renewable energy projects.

Why Carbon Offsets?
Carbon offsets balance out carbon contribution to global warming by funding greenhouse gases reduction projects. With carbon offsets, the portion of carbon emission that cannot be eliminated through conservation can be offset. Funding such projects also create green jobs, engage local community resources, generate local benefits and reduce health and life hazards created by industries such as coal-mining. It also re-creates balance in communities badly affected by carbon emitting industries or climate change.

What are Carbon Credits?
A carbon credit is a financial instrument to denote a unit of reduction in greenhouse gas emissions. Carbon credits are measured in metric tonnes of carbon dioxide-equivalent (CO2e) and may represent six primary categories of greenhouse gases. One carbon credit represents the reduction of one metric tonne of carbon dioxide or its equivalent in other greenhouse gases.

Carbon Care Asia (CCA) sources the best quality carbon credits that are generated from projects of the highest standards. These projects are typically registered and certified with one or more internationally recognized standards, such as Clean Development Mechanism (CDM), Voluntary Carbon Standard (VCS), Voluntary Emission Reduction+ (VER+), Climate, Community and Biodiversity (CCB).

Companies and individuals can buy carbon credits to offset their own emissions on a voluntary basis, whereas designated industries in developed countries (listed under Annex I of the Kyoto Protocol) have mandatory requirements to offset their emissions with specific types of carbon credits if they are not able to reduce their own emissions below designated targets.

In climate change negotiations, the international community has accepted a key principle: the common but differentiated responsibilities. This recognizes that historically:

- Industrialized nations have emitted far more greenhouse gas emissions than developing nations (even if some developing nations are only now increasing theirs) enabling a cheaper path to industrialization;
- Rich countries therefore face the biggest responsibility and burden for action to address climate change; and
- Rich countries therefore must support (because it is easier and cheaper) developing nations to adapt to climate change or to avoid the polluting path to development—through financing and technology transfer, for example.

The above notion of “Climate Justice” underpins the design of carbon credits: by buying carbon credits that are generated from projects located in poor countries, people from developed countries or cities, such as Hong Kong, are able to provide funds to poor communities in developing countries for sustainable development. Care however must be taken to ensure that such projects must have gone through rigorous quality assurance and adhered to recognized international standards. Only these projects will generate carbon credits that can bring genuine sustainability benefits to the communities in need.
The World’s First CDM (AR) + CCB Project

It is the world’s first afforestation and reforestation project that is registered under the UN Clean Development Mechanism (CDM-AR) and simultaneously developed according to the most stringent international standards for “climate, community and biodiversity” (CCB). By integrating CCB standards with CDM protocol, this project pioneers both in China’s forest management and in delivering measurable sustainability benefits to the local community and biodiversity.

The project, strongly supported by China’s Ministry of Forestry and international and local environmental non-governmental organizations (NGOs), was successfully validated by and registered with the CDM-Executive Board under the United Nations Framework Convention on Climate Change (UNFCCC) on 16 November, 2009 after five years of comprehensive research and preparation work. Totalling over 2,250 hectares, this forest restoration project spans five impoverished counties in a district badly stricken by the Sichuan Earthquake in May 2008.

With an initial project life of 20 years, the project’s contribution to carbon reduction is estimated to be 460,000 tonnes of CO2 equivalent, or average 23,000 tonnes a year. Unlike some conventional renewable energy projects, this project delivers strong sustainability benefits in job creation and poverty alleviation. The project sites are degraded lands in the northwestern highlands of Sichuan Province in China. As the sites are located in the buffer zones of important nature conservation areas, the project helps preserve the habitat of many rare species in one of the world’s biodiversity hotspots.

Approval and Registration
This Project, owned and developed by the state-owned Daduhe Forestry Bureau, was approved by China’s National Development and Reform Commission as a Clean Development Mechanism (CDM) Project in November 2008. Registration with CDM-EB under the UNFCCC succeeded on 16 November 2009, validated under UNFCCC’s requirements for CDM project.

Project Coverage
Total 2,251.8 hectares, spanning 5 counties (Li County, Mao County, Beichuan County, Qingchuan County and Pingwu County) in Northwest Sichuan, involving over 12,000 villagers (of which over 5,000 are ethnic minorities) living in 28 villages in
The Mountains of Southwest China Hotspot, one of the world’s 34 biological diversity hotspots, stretches over 161,500 miles from southeastern Tibet through western Sichuan Province and into central and northern Yunnan Province. Covering almost 10 percent of China’s land mass, the hotspot contains almost half of the nation’s bird and mammal species, including those highly endangered. This region sees a range of climates varying from subtropical to alpine, and is made up of forests, meadows and mountains. The five counties are homes to mostly ethnic minorities of Tibetans, Qiang and Hui, most of whom are living below the poverty line. In these locations, problems include unsustainable farming practices and overgrazing that cause erosion and loss of habitat for wildlife species. Creating a successful conservation and climate change mitigation strategy for the region requires addressing the needs of those generally impoverished local communities while restoring native forests, soil nutrients and watersheds.

**Climate Benefits**

Restoring over 2,250 hectares of mixed-use native forests is estimated to bring about a carbon-equivalent reduction of 460,000 tonnes over the 20-year life of the project, averaging 23,000 tonnes in a year. In addition, the managed firewood supply created as part of the project will generate synergistic emissions benefits by decreasing emissions from cutting and burning of other forested areas.

**Community Benefits**

Over 12,000 local farmers of 3,200 impoverished households will benefit from the project, including over 5,300 people of ethnic minorities. The income generation is especially important for the ethnic minorities in Beichuan, Li, Qingchuan and Mao Counties, who live below poverty line. The mean income per capita in this area was only US$210 a year, and some people even live below US$109 a year. The project activities create over 1 million man-days of temporary employment from planting, weeding and tending, thinning and harvesting, etc. The local farmers / communities involved take up most of these employment opportunities, improving their income and livelihood as a result.

**Biodiversity Benefits**

This Project is located at one of the world’s 34 biodiversity hotspots — the Mountains of Southwest China, and within the forest eco-zone of the Upper Yangtze. Many forested and reforested lands covered by this project are close to the nature reserves where many rare and endangered wildlife species live, such as giant pandas, golden monkeys and snow leopards. Cultivated with mixed native tree species, including cypress, fir, pine and birch, these manmade forests become an effective shield to protect the natural habitat of many wildlife species in the reserves nearby. They also help to reverse environmental degradation, mitigate soil erosion and improve the ecological well-being of the upper reaches of the Yangtze River.
What is Certified Emission Reductions (CER)?

Certified Emission Reductions (CERs) are carbon credits issued by the Clean Development Mechanism (CDM) Executive Board of the United Nations for emission reductions achieved by CDM projects and verified by a Designated Operational Entity (an independent auditor) under the rules of the Kyoto Protocol which is ratified by 189 countries.

What is Clean Development Mechanism (CDM)?

The Clean Development Mechanism (CDM) is an arrangement under the Kyoto Protocol allowing industrialized countries with a greenhouse gas reduction commitment (called Annex I countries) to invest in ventures that reduce emissions in developing countries as an alternative to less efficient emission reductions in their own countries.

The carbon credits issued under CDM are to be purchased by buyers in developed countries (Annex I countries), thus facilitating the transfer of funds from the rich countries to the poor countries. This will help redress climate injustice and benefit local communities who are in need of financial support.

The CDM is supervised by the CDM Executive Board (CDM EB) and is under the guidance of the Conference of the Parties (COP/MOP) of the United Nations Framework Convention on Climate Change (UNFCCC).

What is Climate, Community and Biodiversity (CCB)?

The Climate, Community and Biodiversity Project Design Standards (CCB Standards) is the world’s leading standards to evaluate land-based carbon mitigation projects. The standards are designed and supervised by an alliance of international NGOs including the Nature Conservancy, Conservation International, CARE, Rainforest Alliance and Wildlife Conservation Society. Projects qualified under these standards have gone through rigorous quality assurance by independent auditors. They must simultaneously address climate change, support local communities and conserve biodiversity.
CCA has acquired the exclusive world marketing right of this groundbreaking and meaningful project, which brings climate, community and biodiversity to a triple-win situation. With this project, CCA can help promote and facilitate the purchase of voluntary carbon offsets by corporations, institutions and individuals in Hong Kong and beyond, bringing benefits to the climate, indigenous communities and the ecology.

In early November 2009, three CCA team members went for a visit to two of the project sites to get a better understanding of the project, to meet the local government officials, NGO project consultants and local villagers.

On November 26, 2009, CCA officially signed an exclusive global marketing partnership agreement with the Chinese officials of the project owner Daduhe Forestry Bureau. With this, CCA has the exclusive right to market the NW Sichuan Afforestation/Reforestation carbon credits worldwide.

CCA Executive Director Dr Trini Leung (left) signing the partnership contract at Chengdu, The Chinese parties were represented by Mr Wen Yong (middle), Director of the Daduhe Forestation Bureau, Sichuan Province and Mr Li Shengzhi (right), Field Projects Director of the Shan Shui Conservation Centre.

From Chengdu to the project sites, we traveled through the inner mountainous regions of Sichuan through dozens of tunnels. Climate change, increasing number of natural disasters are the “dark ages” we are facing. Vision, collective human effort for conservation and new energy sources are our hope – the light at the end of the tunnel.