

# South Pole Carbon Asset Mgt

www.southpolecarbon.com

# **About**



**About South Pole Carbon** 

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**Projects** 

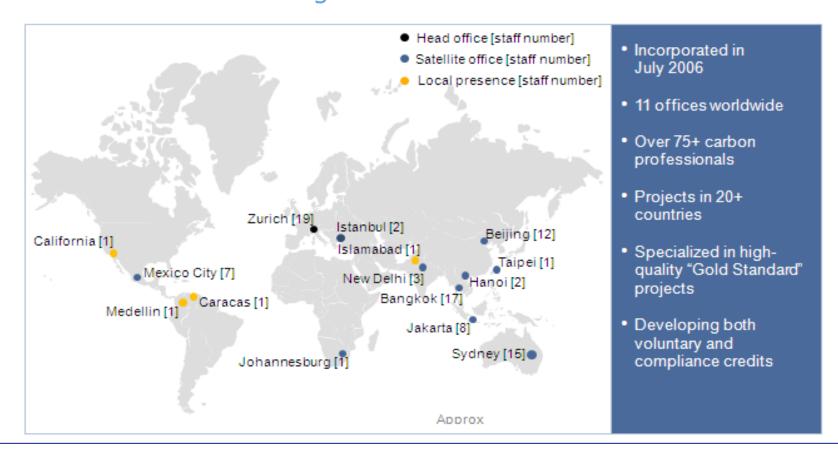
**Contact** 

# **A Global Carbon Company**

South Pole Carbon is an international company that specializes in reducing greenhouse gases and developing innovative climate friendly solutions.

# **About**

With eleven offices around the globe and operations in 25 countries, the company enables the implementation and operation of high-quality emission-reduction projects that address climate change and sustainable.



# **An Awarded Carbon Company**

In 2011 and 2012, the company was named "Best Project Developer" from Voluntary Carbon Market Survey.

'Best Project Developer' by



As well in 2012, Swiss bank Zuercher Kantonalbank awarded us the SME Sustainability Prize.



In 2012, the readers of Carbon Trading magazine recognized our broad experience and excellent work also in the Kyoto space, naming us Best Project Developer CDM.



For our innovative business model emphasizing positive social impact to communities in developing countries, CEOs Renat Heuberger and Dr. Christoph Sutter have won the Social Entrepreneur of the Year 2011 prize, given by the Schwab Foundation.



- Leadership Position on Gold Standard (GS) Registry, market leader in issued GS VER credits
- Thailand most credit issuance, more than 3,000,000 credit has been sold
- First Thai PoA, Small-Scale Renewable Energy PoA in Thailand
- Brought to market the first ever Gold Standard carbon credits (Biomass Malavalli / India)
- Handled the first ever international Kyoto carbon credit transfer
- First company to cancel carbon credits, making sure that they cannot be resold

# **Services**

### Voluntary Market

### Compliance Market

### **High Quality Carbon Credits**

Get your carbon credits directly from the Best Project Developer. Wind power, solar, hydro, biomass, biogas efficient cook stoves, water purification - South Pole Carbon supports projects in more than 25 countries.

### New Carbon Markets

Worldwide carbon markets are developing and evolving fast. South Pole Carbon offers advisory services, scoping studies, and pilot projects around the development of new carbon markets, drawing upon its vast experience with greenhouse gases mitigation action on the ground.

### Climate Friendly Solutions

South Pole Garbon offers tailor-made solutions to innovative companies who take responsibility in the fight against climate change. With the Climate Credit Gard, Gold Power and more - South Pole Garbon has your climate friendly solution.

### Carbon Asset Management and CER Trading

South Pole Garbon has one of the world's largest portfolios of projects registered under the Glean Development Mechanism (GDM). The company acts as buyer and seller of CERs. South Pole Garbon's experience in CDM portfolio management, PoA management, due diligence services, monitoring tools, reporting and verification is unparalleled.

### Forestry

South Pole Carbon guides forest carbon projects worldwide through certification according to international carbon standards. We work in project financing, provide match-making services between project developers and investors, as well as offering forest and land-use carbon advisory services.







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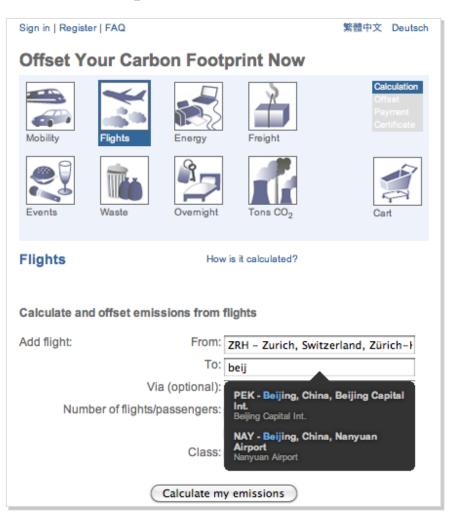
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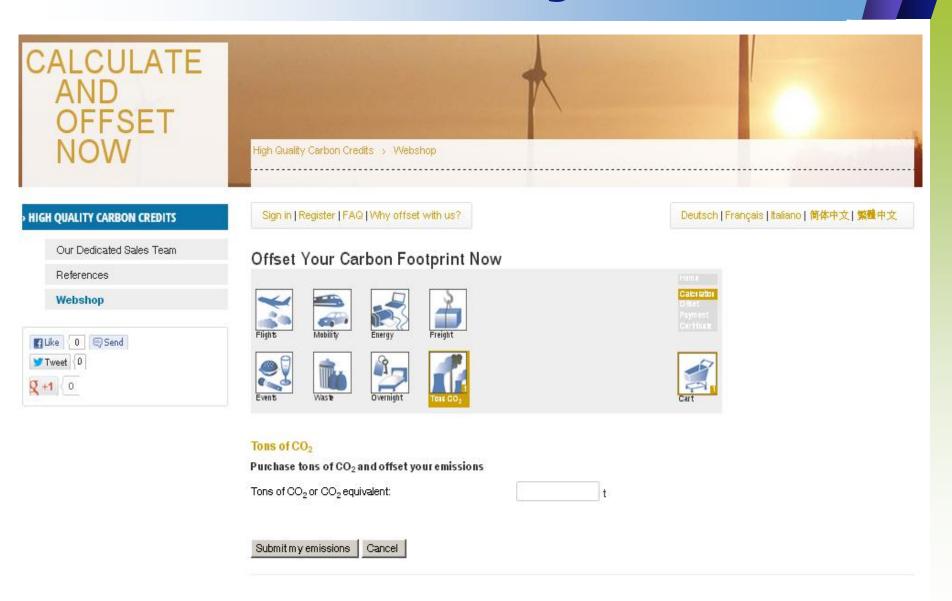
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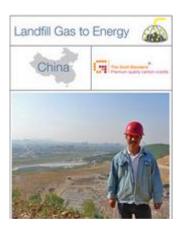
### **South Pole's Carbon Webshop**

- Developed in-house to fully reflect our needs and requirements
- Footprint calculations based on widely shared assumptions from trustworthy sources (GHG Protocol, etc.)
- Transparent, actual projects with third-party verified, issued credits only
- •New projects added on a regular basis to offer our clients the offsetting of their choice
- No minimum sale





# Cooking Stoves The Outst Standard Honduras



### Offset Your Carbon Footprint Now

#### You can offset more emissions by selecting another category:















Category		CO2 emissions from	Tons	
Tons of CO2	0.1 tCO <sub>2</sub> e directly added		0.1	×
	Total		0.1	

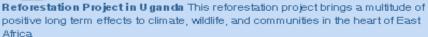
Commit to 2°C Path What is this?

Continue

Currency: EUR ▼

#### Choose Your Emission Reduction Project

© CCB ⓒ





Find more information in our factsheet and video: 🔁 💌

1.70 €

Your offsetting cost at 17.00 €/t with 0% VAT

0 🖼

Cooking stoves in Honduras Distribution of efficient woodstoves



Find more information in our factsheet: 2 Your offsetting cost at 17.00 €/t with 0% VAT

1.70 €

O VCS NEEDS

Wastewater Treatment in Thailand This project captures methane emissions from starch waste water and generates sustainable energy.



Find more information in our factsheet and video: 🔼 💌 Your offsetting cost at 9.00 €/t with 0% VAT and 0.5 € processing fee for amounts under 1 €

1.40 €

Continue

### Offset Your Carbon Footprint Now







### Personal Details

Continue

Please enter your personal details.	
E-mail:	
Title:	Select ▼
First name:	
Last name:	
Company:	
Address line 1:	
Address line 2:	
Zip code:	
City:	
Country:	Afghanistan 🔽 🗸
Telephone:	

### Offset Your Carbon Footprint Now

















#### Checkout

Your purchase will be finalized through the payment method of your choice. Once the purchase is successful, you will be returned to this website and receive a confirmation e-mail with the attached certificate. Please check the information and proceed:

#### . 0.1 Tons of CO2e emitted, comprising:

0.1 tCO2e directly added

#### Order details:

Total tons to be purchased:	0.1	
Offset with credits from:	Reforestation Project in Uganda	
Credits description:	CCBS CarbonFix Credits from a Reforestation Project in Uganda	
E-mail:	avo@post.com click to change	
Total amount to pay:		1.70 EUR

#### Options:

Name on the certificate:

Pat Sura
I ssue the certificate in another name:

I have reported annual emissions and would like that the certificate shows the years that I offset.

I would like to receive a customized footprinting report (free).

#### Choose payment method:





I have read and agree to the Terms and Conditions of purchase.

Proceed with payment

- 24€/tCO<sub>2</sub>e: high cost per offset (instead of maximum emission reduction per investment)
- investment in future offsets (instead of verified, actual emission reductions)
- opaque portfolio
   (instead of actual projects to choose from)

### Choose your offset-portfolio

From: Zurich [Zürich-Kloten], Switzerland, ZRH To: Beijing (Peking) [Capital], China, PEK

return, economy

flight distance: 15'967 km Number of travellers: 1

Choose your offset-portfolio: 3.325 t



Offset with portfolio myclimate Gold Standard
 Offset costs: CHF 107.00

myclimate Gold Standard portfolio: Your contribution to carbon offsetting goes toward myclimate carbon offset projects in developing countries and emerging markets. All projects reduce emissions by replacing climate-impacting fossil fuels with renewable energy or by promoting energy-efficient technologies.

For example, you support the local production, distribution and use of solar cookers and efficient cookers in south-west Madagascar.



Offset with portfolio myclimate Switzerland
Offset costs: CHF 377.00

myclimate Switzerland portfolio: At least half of your emissions are offset within Swiss carbon offset projects; the remaining part is offset within carbon offset projects in developing countries and emerging markets. All projects reduce emissions by replacing climate-impacting fossil fuels with renewable energy or energy-efficient technologies.

Add to shopping cart

- portfolio opaque of actual (instead projects to choose from)
- future investment in (instead offsets verified, actual emission reductions)
- 14€/tCO<sub>2</sub>e: high cost per offset (instead of maximum emission reduction per investment)
- no project or standard information at (instead of detailed project data)



You depend on nature-we're here to save it. We're working with you to make a positive impact around the world in 32 countries, all 50 United States and your backyard.

### Offset Your Carbon Footprint

Your contribution to The Nature Conservancy's carbon offset program will help fund projects that produce measurable reductions in greenhouse gasses. The projects in this program will help stem the tide of climate change and protect habitats and the natural services they provide. As trees grow and sequester carbon, it will take up to 70 years to realize your current offset.



The Nature Conservancy holds high charity ratings.



Mountains in Tennessee

### Enter Your Gift Amount

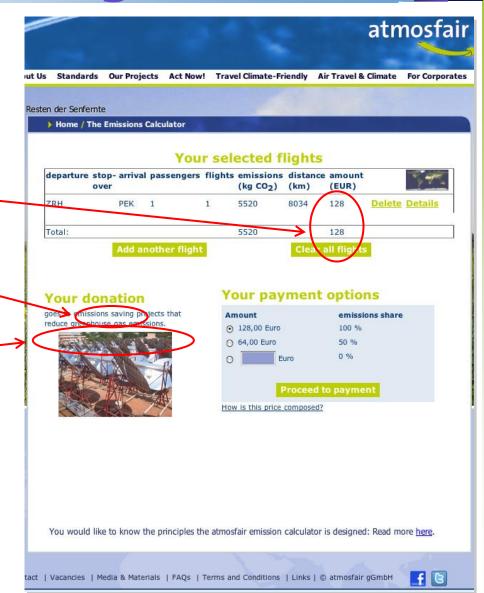
\*Gift Amount:

Your Recommended Offset Contribution (\$20/Ton)

\$148.00

- 1 Ton --\$20
- 2 Tons --\$40
- 5 Tons --\$100
- 25 Tons --\$500
- 50 Tons --\$1.000

- 43€/tCO<sub>2</sub>e: high cost per offset (instead of maximum emission reduction per investment)
- investment in future offsets (instead of verified, actual emission reductions)
- opaque portfolio
   (instead of actual projects to choose from)
- no project or standard information at all (instead of detailed project data)





### Carbon Footprinting Report for the Years 2009 to 2010

#### Client:

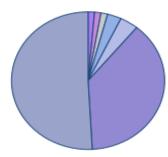
Jennifer Perkins 22 Freedom Rd. W11 2BQ London GB

#### Disclaimer:

This is an automated footprinting report. It is fully dependent on the accuracy of information provided by the client. For a detailed footprinting report of all of your activities, enterprises or products, please contact: footprinting@southpolecarbon.com

### **Emissions Reported by Category:**





The majority of emissions, corresponding to 50.87% of the total reported emissions, are coming from the category "Energy".

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### Biomass to energy, Thailand

The Kangwal project reduces greenhouse gas emissions by generating climate neutral power that otherwise would have been generated by the burning of fossil fuel. It uses agricultural wase that before was of no use.

### Biomass to Energy



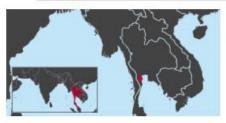




Biomass is replacing fossil fuel in a Thai polyester plant.



#### Location



This project is situated in a large polyester manufacturing plant in Phetchaburi region 120 km South-West of Bangkok. The local economy is dominated by agriculture, e.g. rice farming, fruit growing and palm sugar production.

### Project

The project activity comprises the generation of thermal energy for a thermal oil heater in a polyester plant using agricultural biomass waste generated nearby the plant.

The biomass waste (i.e rice husk, wood chips, palm and coconut shells) which is abundantly available for the project activity would otherwise have been burned in the fields or left to decay, emitting CO<sub>2</sub>, NOx and methane into the atmosphere.

Since all CO<sub>2</sub> emitted by the new power generators has been absorbed from the air by the plants beforehand this process is completely climate neutral.





### Wastewater treatment, Thailand

This project is engaged with mitigating global warming and local air pollution at a Thai starch plant by capturing methane and generating sustainable energy and social benefits for local communities.

### Wastewater Treatment







Methane from starch wastewater is captured and used for sustainable power generation.



#### Location



The wastewater cycle was installed in a starch plant 200 km North-East of Bangkok, in a rural region with mostly agricultural background. The starch is produced from the region's main product cassava roots, grown by farmers from a radius of 30 km around the plant.

### **Project**





Only a few years ago, the inhabitants of the surrounding villages could smell the open lagoons used for clearing the starch wastewater. To-day, not only the local air and water quality has improved significantly, at the same time the starch plant managed to reduce its fossil fuel use by 80%. The now clean wastewater cycle even allows for fish farming in the water that is finally released from the new process. In addition, the project and the resulting carbon revenues generated jobs for locals and support social and educational activities in the community to enable sustainable development.

Technically, the project activity involves the installation of a closed anaerobic wastewater treatment facility (Upflow Anaerobic Sludge Blanket technology) at a starch manufacturing plant with a large output of waste water every day. Before the installation of the project the wastewater in the plant was treated through cascading open lagoons with a retention time of more than a year. The mix of the lagoon size, atmospheric and water temperature, resulted in an anaerobic environment in the ponds. These conditions led to methane generation from the organic content of the wastewater which was steadily released into the atmosphere. Methane is a greenhouse gas 21 times stronger than CO.

Now, the captured methane can be used for clean energy production in a burner on the plant site, replacing fossil fuel for heat generation to dry the starch. Thus, the emission reduction project has a double effect, keeping methane from heating up our climate and at the same time avoiding the burning of thousands of tons of fossil fuel per year.

### Wastewater treatment, Thailand

This project is involved in mitigating global warming and local air pollution at a Thai oil mill by capturing methane, generating sustainable energy and creating social benefits for local communities.

### Location



A wastewater cycle was installed in an oil mill in southern Thailand, in a rural, agricultural region. Oil is produced from palm fruits that are grown by predominantly small-scale local farmers.

### **Wastewater Treatment**







Methane from an oil mill's wastewater is captured and used for sustainable power generation.



#### **Project**





Just a few years ago, the inhabitants of the villages surrounding the mill could smell the open lagoons used in clearing the oil mill's wastewater. Today, not only has the local air and water quality improved significantly, but the mill has also reduced its greenhouse gas emissions by about  $25,000\,{\rm tCO_2}e$  p.a. In addition, the project and the resulting carbon revenues have generated jobs for locals and support social and educational activities in the community, enabling sustainable development.

Technically, the project activity involved the installation of a Complete Stirred Tank Reactor (CSTR), a biogas reactor technology. Before the installation of the project, the wastewater in the mill was treated through eight cascading open lagoons, with a retention time of more than one year. The combination of the lagoons' size, atmospheric and water temperatures resulted in an anaerobic environment in the ponds. These conditions led to methane generation from the organic content of the wastewater, which was then steadily released into the atmosphere. Methane is a greenhouse gas 21 times more harmful than CO<sub>3</sub>.

Today the captured methane can be used for clean energy production in two gas engines which generate electricity to be supplied to the national grid. This emission reduction project has a double effect: keeping methane from heating up our climate and at the same time avoiding the burning of thousands of tons of fossil fuel per year. The project has a total electrical generation capacity of 2.5 MW.

The project owner aims to recycle the treated water in cleaning the raw palm fruit.

### Wastewater treatment, Thailand

By capturing methane from wastewater produced at a Thai palm oil mill, this project mitigates global warming. In addition, the project reduces local air pollution, generates sustainable energy and provides socio-economic benefits to local communities.

### Wastewater Treatment







Methane from starch wastewater is captured and used for sustainable power generation.



### Location



The wastewater treatment project is situated about 800 km south of Bangkok in Trang Province, at the western shore of the Malay Peninsula. The region, situated between the Khao Luang mountains and the Andaman Sea, is dominated by agriculture production (mostly rubber plantations).

### **Project**





Prior to the implementation of the project, locals were subjected to a foul smell coming from the open lagoons used to clear the palm oil mill's wastewater. Today, because of the project, the local air and water quality have improved significantly. In addition, the mill has reduced its use of fossil fuel. Guided by a sustainable development model, the project has generated jobs for locals and supported social and educational activities in the community.

The project activity involves the installation of an upflow anaerobic sludge blanket (UASB) technology at an oil mill with a large output of wastewater. Before the installation of the project, the wastewater in the plant was treated through seven cascading open lagoons with a retention time of more than a year. The mix of the lagoon size and atmospheric and water temperature resulted in an anaerobic environment in the ponds. These conditions led to methane (a greenhouse gas 21 times stronger than CO2) generation from the organic content of the wastewater which was steadily released to the atmosphere.

Now the captured methane is used to fuel a 1MW burner on the plant site, replacing fossil-fuel grid power with clean energy. Thus, the emission reduction project keeps methane from heating up our climate and avoids the burning of thousands of tonnes of fossil fuel per year.

### Biomass co-firing, Thailand

This bundled project is a combination of five greenhouse gas reduction projects located in five different cement manufacturing units. Partial replacement of fossil fuels by less carbon intensive fuels during the energy intensive cement manufacture process mitigate global warming and benefit local communities.

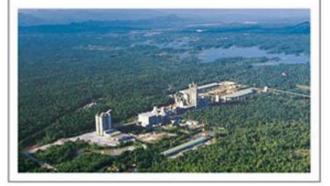
#### Locations







Biomass is replacing fossil fuels in five different cement plants all over the country.





Of the five sites, three are located in Saraburi province: Kaeng Khoi District, Ban Kor District and Phaputtabat District, approximately 120 km north of Bangkok. One project site is situated in Lampang province, approximately 600 km north of Bangkok. The remaining project site is located in Nakon Si Thammarat province, approximately 835 km to the south of Bangkok.

### Project





In the rural regions of Thailand, access to medical treatment is no matter of course, even with the public health system being modernized. In the province of Saraburi, cement manufacturer Siam Cement is only providing free medical service not only to their employees but also to surrounding communities. Their mobile medical unit stops by once per month to give free examination and treatment, from eye problems to x-ray.

Awareness of environmental topics, the will to address climate change, and social consciousness for surrounding communities characterize the project owner. Thailand's growing economy has a huge potential for the implementation of climate friendly technologies such as biomass utilization, e.g. large amounts of carbon can be saved by partly switching fuel use from fossil to renewable in existing cement plants.

With the project activity, carbon intensive fuels such as coal and heavy oil are replaced by wood, rice husk and other agricultural wastes from the region. In order to implement this carbon mitigation project, a complete system for the collection, storage and feeding for the alternative fuels has been introduced. The collection of biomass is done from nearby areas depending on the type of available biomass and crop patterns in the specific region. Before the implementation of the project activity, the biomass was considered waste and rice husk burnt in open fields – still a common practice in developing countries. Other agricultural wastes were left in the fields to decay aerobically. Now, the former waste is given value and brings additional income to rural communities.

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and join...

# A big network of client

South Pole Carbon – in the service of climate protection



\*Majority stake in Climate Friendly \*\* Environmental Finance's Voluntary Carbon Market Survey 2011 and 2012; \*\*\* Schwab Foundation/WEF

'Premium Service with Reasonable Cost'.....select South Pole

